

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

In the matter of Verizon Wireless)
)
) Docket No. 01-0007
Petition for Arbitration Pursuant to Section)
252(b) of the Telecommunications Act of 1996)
to Establish an Interconnection Agreement with)
Illinois Bell Company d/b/a Ameritech Illinois)

**INITIAL BRIEF OF THE STAFF
OF THE ILLINOIS COMMERCE COMMISSION**

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I. INTRODUCTION

NOW COMES the Staff of the Illinois Commerce Commission (“Staff”), by and through its counsel, and, pursuant to Section 761.440 of the Commission’s Rules of Practice, 83 Ill. Adm. Code 761.440, submits its Initial Brief in the instant arbitration proceeding.

II. PROCEDURAL BACKGROUND

This proceeding was initiated pursuant to a Petition (hereinafter, the “Arbitration Petition”) for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 (“1996 Act”), 47 U.S.C. § 252 (b), to Establish an Interconnection Agreement with Illinois Bell Telephone Company d/b/a Ameritech Illinois (hereinafter “Ameritech”), filed on January 5, 2001 by Verizon Wireless (hereinafter, “Verizon”). The Arbitration Petition included a draft of the Interconnection Agreement under negotiation by the parties, identified 11 unresolved issues with respect to such Interconnection Agreement, and detailed the position of each of the parties with respect to those issues.

On January 10, 2001, Hearing Examiners Leslie Haynes and Sherwin H. Zaban held a pre-hearing conference. As a result of such conference, the Hearing Examiners set a schedule for party filings and continued the hearings to March 8 and 9, 2001. On January 18, 2001, Ameritech served its discovery responses to Verizon’s data requests.. Verizon filed its verified statements and its responses to Ameritech’s discovery requests on January 25, 2001. On February 2, 2001, Ameritech filed its Response to the Arbitration Petition (hereinafter “Response to Petition”). In its Response to Petition, Ameritech

identified nine additional arbitration issues (hereinafter "AIT-1 through AIT-9"). Ameritech then filed its verified statements on February 9, 2001.

On February 14, 2001, Verizon filed supplemental testimony to respond to the new issues raised in Ameritech's response to the Petition. Staff filed and served its requests for discovery on February 6 and February 15, 2001. Prior to Staff's submission of testimony in this proceeding, Ameritech and Verizon resolved a number of issues raised in this Arbitration proceeding. As a result, on March 2, 2001, Staff filed the verified statements of its witnesses, which statements addressed only those issues identified in the Arbitration Petition as Issue Nos. 1(A) & (C), 4, 7 and 10. Staff also filed additional data requests at this time.

Evidentiary hearings with respect to this proceeding were held in Chicago, Illinois on March 8 and 9, 2001. At the conclusion of the March 9, 2001 evidentiary hearing, the parties set a briefing schedule which provided for the filing of simultaneous initial briefs on March 26, 2001, reply briefs on March 30, 2001, a Hearing Examiners proposed arbitration decision on April 11, 2001, and briefs on exceptions on April 16, 2001. The record was then marked "Heard and Taken".

III. SUMMARY OF STAFF'S POSITION

The remaining unresolved issues which Staff addressed in its testimony and at the hearings are the following: Issue No. 1 (A) (Interconnection At Technically Feasible Points-Direct Trunking) 1(C) (Interconnection At Technically Feasible Points-Points of Interconnection), Issue No. 4 (Non-Symmetrical Reciprocal Compensation), Issue 7 (Calculating CMRS Tandem Rate) and Issue 10 (Transiting Rates), as identified in the

Arbitration Petition. The following is a summary of Staff's positions with respect to these issues.

With respect to Issue No. 1(A) (Interconnection At Technically Feasible Points-Direct Trunking), Staff believes that Ameritech's proposed requirement that Verizon establish a direct trunk group when the traffic reaches a level equal to 1-DS1 is reasonable, but points out there are other equally reasonable means of establishing these trunk groups.

With respect to Issue 1(C) (Interconnection At Technically Feasible Points-Points of Interconnection), Staff recommends that Verizon be permitted to connect at any technically feasible point in Ameritech's network in accordance with FCC rules. Staff makes this recommendation notwithstanding Ameritech's arguments that they be entitled to restrict Verizon's right interconnect when a tandem exhaust threshold is reached. As a result, Staff requests that the Commission adopt Verizon's proposal set forth in Section 2.1.7 of the interconnection agreement. Since the parties agree that allowing Verizon to interconnect at any technically feasible point is consistent with FCC rules, Staff argues that Ameritech's restriction on Verizon's right to interconnect only at points which have been mutually agreed upon by the parties contradicts Verizon's statutory right. Ameritech is trying to place unreasonable limitations on Verizon. FCC rules do not allow for Ameritech to arbitrarily limit Verizon's rights. Ameritech offers no justification for requiring the parties to negotiate and mutually agree upon each Point of Interconnection. Ameritech may not limit nor impose restrictions on what has been considered by this Commission and by the FCC as technically feasible points of interconnection. Therefore, Verizon's proposed contract language on this issue should be accepted.

With respect to Issue No. 4 (Non-Symmetrical Reciprocal Compensation), Staff recommends that Verizon be entitled to collect reciprocal compensation from Ameritech

for land-to-mobile traffic that is symmetrical to the tandem rate charged to Verizon by Ameritech for mobile-to-land traffic. Staff believes that the Commission need not, within this arbitration proceeding, decide whether the FCC intends geographic criteria alone, or geographic and functionality criteria together, to be the basis for determining whether the tandem or end office rate should be applied. Based on the testimony of both Ameritech and Verizon witnesses, Staff concludes that traffic terminated on the Verizon network satisfies both geographical coverage and functionality tests, and, therefore, Verizon should be compensated at Ameritech's tandem rate.

With respect to Issue No. 7 (Calculating CMRS Tandem Rate), Staff recommends that Ameritech institute billing for the tandem transport component of its tandem termination rate based on actual mileage since billing based on actual mileage will likely result in substantial benefits to Verizon's end-users. Moreover, as Ameritech's own witness indicated¹, since billing based on median mileage is the product of tradition rather than cost prohibitions associated with upgrading Ameritech's billing system, Staff expects that the benefits to Verizon's customers will outweigh any costs to Ameritech or its customers associated with instituting billing based on actual mileage. Recognizing that instituting a billing system based on actual mileage will take Ameritech some time, Staff also proposes an interim measure, which is more particularly described herein.

With respect to Issue No. 10 (Transiting Rates), Staff made numerous attempts to query Ameritech about the differences between transit and termination tandem switching costs, yet, Ameritech provided no justification. At the hearing, Ameritech acknowledged Staff's request, however, they failed to provide a witness that could explain the differences

between the rates. Therefore, pursuant to Section 252(b)(4)(B) of the 1996 Act, the Commission should proceed on the basis of the best information available.

IV. ARGUMENTS

Issue No. 1: Interconnection Architecture .

(A) Direct Trunking

In its Arbitration Petition, Verizon summarizes its position on this issue (which relates to Section 5.4. of the Interconnection Agreement), as follows:

SBC (Ameritech) seeks to place unilateral and unreasonable restrictions on Verizon Wireless' ability to interconnect at technically feasible points. Verizon Wireless has continually expressed its desire to interconnect at SBC's (Ameritech's) tandems or end offices in the manner which Verizon Wireless considers to be the most economical and efficient. Ameritech wants Verizon Wireless to agree to trunk direct to any SBC (Ameritech) end office once the traffic reaches 500 Centum Call Seconds (CCS) from the entire Verizon Wireless network during the busy hour.

Arbitration Petition at 10.

The basis for Ameritech's position is the following:

The objective of Ameritech Illinois' proposed requirement for section 5.4.4-a requirement to which Ameritech Illinois itself adheres by establishing direct trunking between its own end offices when the traffic between those offices reaches a threshold-is to help prevent premature tandem exhaust, which adversely affects Ameritech Illinois, Verizon Wireless and every other carrier in Illinois that uses Ameritech Illinois' network.

Response to Petition at 3.

The parties agree that Verizon is entitled to interconnect with Ameritech's network at any technically feasible point. Verizon Direct Testimony (Clampitt) at 7 and; Ameritech

¹ Tr. at 268.

Direct Testimony (Way) at 4.² (“Ameritech Illinois recognizes that Verizon Wireless is entitled to establish interconnections with Ameritech Illinois at any and all technically feasible points on Ameritech’s network.”) The parties differ, however on whether FCC rules permit any restriction on this right.³

In Section 209 of the First Report and Order,⁴ the FCC states that “Section 251(c)(2) of the 1996 Act gives competing carriers the right to deliver traffic terminating on an incumbent LEC’s network at any technically feasible point on that network, rather than obligating such carriers to transport traffic to less convenient or efficient interconnection points.” This right enables CLECs to compete and allows them to avoid unreasonable unilateral restrictions that the ILEC might otherwise try and impose upon them to limit competition.

Notwithstanding the general right to interconnect described in Section 209 of the First Report and Order, Section 203 of the First Report and Order appears to permit some limitations to be imposed upon this right. In Section 203, the FCC stated that:

[w]ith regard to network reliability and security, to justify a refusal to provide interconnection or access at a point requested by another carrier, incumbent LECs must prove to the state commission, with clear and convincing evidence, that specific and significant adverse impacts would result from requested interconnection or access.”

² A8

³ (See Ameritech Direct Testimony (Way) at 4 (A8) “ A requirement that Verizon Wireless move traffic off Ameritech Illinois’ tandems when the circumstances call for it does not limit that right”]; also Verizon Direct Testimony (Clampitt) at 9, “The restriction is unlawful [because it goes against the FCC rules]. It is also unreasonable. [Ameritech] cannot demonstrate that the 500 CCS requirement is necessary”).

⁴ Re: Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-325, 11 FCCR 15,499, Rel. Aug 8, 1996, (“First Report and Order”) ¶1209.

Therefore, there must be a “balancing” determination between Ameritech’s ability to protect its network and placing unreasonable inhibiting competitive requirements on Verizon.

Furthermore, the parties disagree as to whether Ameritech’s rules regarding tandem exhaust result in a limitation of this right. Ameritech argues that, “Verizon should establish direct trunking to an Ameritech end office when Verizon sends the equivalent of one DS1 of traffic to that end office. Similarly, Verizon should exercise its best efforts to establish direct trunking with any carrier when Verizon transits the equivalent of one DS1 of traffic to that carrier through Ameritech’s network” Ameritech Direct Testimony (Way) at 3.

⁵ Verizon asserts that Ameritech’s requirement to trunk direct to all end offices, rather than interconnect at Ameritech’s tandems, limits its right to connect at any technically feasible point. Verizon Direct Testimony (Clampitt) at 7. Ameritech contends that its proposed rules to prevent tandem exhaust do not restrict Verizon’s right to interconnect at any feasible point in Ameritech’s network.

At the hearing, during cross examination of Verizon Witness Mr. John Clampitt, Ameritech proposed alternative language for section 5.4.4 of the Interconnection Agreement (hereinafter “5.4.4”). Tr. at 55. Ameritech Cross Exhibit 1. Mr. Clampitt testified that Ameritech’s new proposed language for 5.4.4 eliminates the requirement for Verizon to establish direct trunking to an Ameritech Illinois end office when the volume of traffic to that end office from Verizon Wireless’ entire network hits the trigger point [of 500 CCS]. Tr. at 59-60. Mr. Clampitt also acknowledged that the new proposed language for 5.4.4 changed the trigger point for direct end office trunking from 500 CCS to 864 CCS., which

is equivalent to 24 fully utilized trunks or 1 DS1. Id. Despite these concessions, Mr. Clampitt continued to have some objections to Ameritech's new proposed language for 5.4.4. Id. at 61. Mr. Clampitt raised the following concerns regarding the proposed 5.4.4 language as it pertains to the new trigger point as well as the proposed time period of 60-days to establish a two-way direct End Office Trunk Group to an end office:

We believe that this would be a compromise on our part to agree to a DS-1 in all cases for 864 CCS to an end office. So this would be a concession on our part as part of a total package. We do not agree to this issue by itself at any particular trigger point. Secondly, we also disagree with the limitation or the time imposition here of 60 days....60 days is not, in my opinion, or in the opinion of our technical folks, a reasonable time period.

Tr. at 61-62.

Mr. Clampitt acknowledged that if "we have a defined trigger point where it's mandatory to trunk direct, I believe a reasonable figure from the effective date of the contract,...we would say that 180 days is reasonable notification to actually meet these requirements. And after that we would suggest that any other subsequent notifications could be met within 120days." Tr. at 69.

Staff witness, Russell Murray, stated in his verified statement that "[d]irect trunking could relieve the potential for tandem exhaust...[and] Ameritech has requested Verizon Wireless to establish a direct trunk group when the traffic reaches a level equal to 1-DS1⁶. Ameritech further explained that the traffic had peaked—had to peak at that volume for three consecutive months. I do not feel that this request is totally unreasonable." Tr. at 297 and Staff Direct Testimony (Murray) at 5. Although Ameritech's proposal for direct trunking

⁵ A7

⁶ It was determined through Staff's data requests that 1 DS-1 is equal to 24 trunks. (Staff Exhibit 3(B) at RWM 2.1)

does not seem “unreasonable” in light of the continuing potential problem for tandem exhaust, it must be balanced against forcing Verizon to do the work of the tandem switch and bear those costs where it is not efficient or economical for them to do so. Ameritech must demonstrate that the “trigger point” requirement (864 CCS/ 1 DS1) is a necessary restriction in order to avoid severe adverse network impacts. See Section 203 of the First Report and Order.

Accordingly, Mr. Murray went on to add “I believe that there are other methods available to establish these trunk groups other than having Verizon Wireless build a new facility from Verizon Wireless’ office to the end office. For example, if Verizon Wireless currently has facilities to the Tandem office, which terminates at a point of interconnection (POI), in this case a Digital Automatic Cross-connect System (DACS), [t]he port in the DACS can be cross-connected through software commands to a facility going to the end office. This would probably require both Verizon Wireless and the end office to do translation changes in their switches.” Tr. at 297 and Verified Statement of Russell Murray at 6. It should be noted that in addition to the DACS, there are other points of interconnection available that would allow Verizon to connect to an Ameritech end office without going through the tandem switch. Tr. at 300-301. In further support of this compromise, Ameritech witness Mr. Samuel Way acknowledged that Ameritech would “entertain” the idea of allowing Verizon to go to the POI at the tandem and then connect to the end office without going through the tandem switch. Tr. at 214-215.

Staff believes the proposed language for 5.4.4 (see Ameritech Cross Ex. 1) should reflect that Verizon should not be required to establish a direct trunk group to an end office

where there are currently facilities from Verizon to the tandem and from the tandem to the end office.

(C) Points of Interconnection

Verizon asserts in its Arbitration Petition that “[p]ursuant to the statutory right granted by 47 U.S.C § 251 (2)(c)(B), Verizon Wireless may interconnect at any technically feasible location as specified in 47 CFR § 51.305. Ameritech may not unilaterally refuse requests for interconnection at technically feasible points by withholding mutual agreement.” Petition for Arbitration at 17.

Staff agrees. In 47 C.F.R. § 51.305 the FCC defined a minimum of six points it considered feasible. The FCC stated:

- “(a) An incumbent LEC shall provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the incumbent LEC’s network:
- (1) For the transmission and routing of telephone exchange traffic, exchange access traffic, or both;
 - (2) At any technically feasible point within the incumbent LEC’s network including, at a minimum:
 - (i) The line-side of a local switch;
 - (ii) The trunk-side of a local switch;
 - (iii) The trunk interconnection points for a tandem switch;
 - (iv) Central office cross-connect points;
 - (v) Out of band signaling transfer points necessary to exchange traffic at these points and access call-related databases; and
 - (vi) The points of access to unbundled network elements as described in § 51.319;47 C.F.R. § 51.305.

Inclusion in the Interconnection Agreement of these six examples of technically feasible points of interconnection is important to Verizon because these examples further demonstrate that Ameritech may not impose unreasonable restrictions on what has been considered by the FCC to be technically feasible points of interconnection.

In Section 251(2)(c)(B) of the 1996 Act, Congress clearly imposed a duty upon ILECs “to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier’s network...at any technically feasible point within the carrier’s network.” Congress did not qualify this obligation by making it subject to mutual agreement by the parties. “If each and every point of interconnection must be at a mutually agreeable location, Verizon Wireless will be denied its statutory right to interconnect at any technically feasible point. Clearly, Congress recognized competitors could not be dependent on the “agreement” of ILECs in order to interconnect.” Verified Statement of John Clampitt at 16.

Staff witness Russell Murray requested that Verizon define terms for interconnection options that Verizon set out in section 2.1.7 of the Interconnection Agreement.⁷ Staff believes that the interconnection options in sections 2.1.1, 2.1.7, 2.1.7.1, 2.1.7.2, 2.1.7.3, 2.1.7.4, 2.1.7.5, 2.1.7.6, 2.1.7.7 (See Verizon Petition for Arbitration Interconnection Agreement at 11-13) are all technically feasible points of interconnection as specified under 47 C.F.R. § 51.305 and therefore should be included in the Interconnection Agreement.

Furthermore, it should be noted that at no time during the entire proceedings did Ameritech offer any support for their position to delete various portions of Sections 2.1.1, 2.1.7, 2.1.7.1, 2.1.7.2, 2.1.7.3, 2.1.7.4, 2.1.7.5, 2.1.7.6, and 2.1.7.7 of the Interconnection Agreement.⁸ Ameritech offers no support for omitting certain language in 2.1.1-2.1.7.7. Moreover, Ameritech had an opportunity at the hearing to cross examine Verizon’s

⁷ (See Staff Exhibit 3 (D) at RWM 4.1)

witnesses regarding these issues and chose not to do so. At no time has Ameritech brought forth any new evidence or testimony that would justify excluding certain interconnection configurations from Section 2.1.7 that Verizon had proposed in the Interconnection Agreement.

Staff believes this is a clear case where Ameritech failed to provide necessary information for the Commission to reach a decision on an unresolved issue. Pursuant to Section 252 (b)(4)(B) of the Telecommunications Act of 1996,

[t]he State commission may require the petitioning and the responding party to provide such information as may be necessary for the State commission to reach a decision on the unresolved issues. If any party refuses or fails unreasonably to respond on a timely basis to any reasonable request from the State commission, then the State commission may proceed on the basis of the best information available to it from whatever source derived.

In this instance, Ameritech failed to provide any justification for its position, therefore, the Commission must proceed on the basis of the best information available which is Verizon's statutory right, granted by 47 U.S.C. § 251(2)(c)(B), to interconnect at any technically feasible location.

Issue No. 4: Non-Symmetrical Reciprocal Compensation

Is Verizon entitled to collect reciprocal compensation from Ameritech for land-to-mobile traffic that is symmetrical to the tandem rate charged to Verizon by Ameritech for mobile-to-land traffic, or should it be symmetrical to the end office rate charged by Ameritech?

Ameritech and Verizon agree that the 1996 Act and the FCC rules⁸ permit Verizon to collect reciprocal compensation from Ameritech Illinois for land-to-mobile traffic that is

⁸ (See Response to Petition for Arbitration at 4-5; Ameritech Direct Testimony (Way) at 9-10 (A23-28); and Tr. at 172-223).

⁹ Ameritech Witness Way testified at hearing that he did not review any sections of the Code of Federal Regulations in preparing his testimony on Issue 4, and that in particular, he did not review 47 Code of Federal Regulations 51.711-A-3, which provides a geographic coverage test for the tandem reciprocal

symmetrical to the rate charged to Verizon by Ameritech for mobile-to-land traffic. Ameritech Direct Testimony (Way) at 10, 11; Verizon Direct Testimony (Clampitt) at 24.

Staff also agrees. As stated in the direct testimony of Staff Witness Zolnierek, “Section 251(b)(5) of the 1996 Telecommunications Act obligates all local exchange carriers to establish reciprocal compensation arrangements for the transport and termination of telecommunications.” Staff Direct Testimony (Zolnierek) at 3. Section 252(d)(2) of the 1996 Act further requires that this compensation be based upon a “...reasonable approximation of the additional costs of terminating such calls.”¹⁰ Id.

Furthermore, Section 51.711(a) of the FCC rules requires that, in the absence of evidence that a carrier other than an incumbent local exchange carrier (“ILEC”), including a Commercial Mobile Radio Service Provider, has transport and termination costs that exceed the ILEC’s costs for transport and termination, rates for transport and termination of local telecommunications traffic should be *symmetrical*.¹¹ Id. at 3-4. Rule 51.711(a) also establishes that, when a carrier other than an ILEC assesses transport and termination charges on an ILEC, symmetrical rates are those rates that the ILEC itself assesses upon the other carrier for the same services. Id. at 4.

The dispute in Issue 4 is which rate is the appropriate symmetrical rate to be charged, the tandem rate or the end office rate. Verizon argues that the appropriate rate is

compensations rate. Tr. at 198. Despite his testimony at the hearing, his pre-filed direct testimony indicates that he did review the rules implementing the 1996 Act (although Rule 51.711(a)(3) is never directly cited or discussed in such pre-filed testimony). Ameritech Direct Testimony at 12, “In its rules implementing the 1996 Act, however, the FCC determined that the interconnecting carrier (Verizon Wireless in this case) may charge ‘symmetrical’ transport and termination rates, that is rates equal to the rates charged by the incumbent carrier (Ameritech Illinois) for transporting and terminating traffic that originates on the competing carrier’s network.”

¹⁰ See 47 U.S.C. § 252(d)(2).

¹¹ See Title 47, Code of Federal Regulations (CFR) § 51.711(a).

the tandem rate. Verizon Direct Testimony (Clampitt) at 24. Ameritech argues that the appropriate rate is the end office rate. Ameritech Direct Testimony (Way) at 12-13¹².

Also in dispute is whether the FCC requires the satisfaction of both a geographical test and a functionality test, or just a geographical test, before a competing carrier can charge the tandem rate as its reciprocal compensation.

Verizon argues that the geographical test alone is all that is required. Verizon Direct Testimony (Murphy) at 6. Verizon's rationale is twofold. First, Verizon looks to Paragraph 1090 of the First Report and Order.

Paragraph 1090 states the following:

We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states *may* establish transport and termination rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch. In such event, states shall also consider whether new technologies (e.g., fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch. *When the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate.*

First Report and Order at ¶ 1090 (Emphasis added).

Verizon interprets Paragraph 1090 to permit a state commission to establish in the arbitration process transport and termination rates that vary according to whether the traffic is routed through a tandem switch or directly to an end office switch "...only...if the

¹² A31-A33.

requesting carrier's switches did not meet the test for geographic coverage..." Id. Verizon argues that "[f]unctional equivalency is only mentioned in the body of discussion in Paragraph 1090 to address [such] circumstances..." where the geographical test was not met. Id.

Second, Verizon supports its argument that the tandem rate is justified by looking to the Code of Federal Regulations, in particular, Rule 51.711, which addresses what "symmetrical" means. Section 51.711(a)(3) unequivocally indicates that geographical criteria should be employed to make this determination. Section 57.711(a)(3) provides in pertinent part:

Where the switch of a carrier other than an incumbent LEC serves a geographical area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

47 CFR § 51.711(a)(3).

According to Verizon, "Rule 57.711 which addresses symmetry does not mention functionality at all, yet it does restate the geographic area of coverage and the appropriate rate to be applied where coverage is comparable. Id. at 7.

Verizon asserts that the geographic coverage of its MTSOs is greater than, or equal to, the geographic coverage of Ameritech's tandem switches. Verizon Direct Testimony (Murphy) at 5. Ameritech has not disputed this claim, nor does Staff¹³. As support for its

¹³ Ameritech put no evidence into the record regarding the factual question of whether Verizon's network met the geographical coverage test, apparently electing to rely solely on Ameritech's arguments that (i) a functionality test is required by federal law; as well as a geographical coverage test and (ii) Verizon's network fails such functionality test. At the hearings, Ameritech's Witness Samuel Way stated on cross examination that he had not compared Verizon's geographic coverage with that of Ameritech's network and that he was not sure if the geographical coverage of the networks were comparable. Tr. at 198-201. He did state, however, that he was aware of the exhibits attached to Verizon's witness Murphy's direct testimony that provided evidence of geographic coverage. Tr. at 198.

assertion, Verizon provides evidence in its direct testimony of the coverage area of its own network. *Id.* at 4. Verizon also provides evidence comparing the geographical coverage of its network with that of Ameritech. *Id.* at 5-6; see, also Exhibits LDM-1 and LDM-2. Ameritech provides no evidence in this proceeding of the geographical coverage of the Ameritech network, nor of its comparability to the geographical coverage of the Verizon network. *Tr.* at 204, lines 18-21. Thus, the issues remaining unresolved in connection with this Issue 4 appear to be, whether a functionality test is required by federal law and, if so, does Verizon satisfy any such test.

As discussed above, Verizon does not believe that application of a functionality test is appropriate in cases where a carrier passes the geographical test. Nevertheless, Verizon argues that its network satisfies the functionality test identified in the First Report and Order.

Verizon argues that “...MTSOs and peripheral equipment perform similar functionality and are actually more complex than an incumbent LEC’s tandem and end office switches.” Verizon Direct Testimony (Murphy) at 7. Verizon further argues that a wireless MTSO does much more than a tandem switch which routes a call to a specific end office (which end office then terminates the call to the subscriber line). *Id.* at 9. An MTSO “quer[ies] the HLR to determine status and general location of the mobile customer and then rout[es] the call to other devices (Base Station Controller and Base Station), which terminate the call to the mobile unit connected to the Base Station at that particular moment in time.” *Id.*

In its Response to Petition, Ameritech interprets Paragraph 1090 of the First Report and Order to require Verizon's switch, i.e., its Mobile Telephone Switching Offices ("MTSOs")/cell site configuration, to satisfy two tests:

Under paragraph 1090 of the FCC's *First Report and Order*, Verizon Wireless would be entitled to charge the tandem rate if and only if it could satisfy two tests: First, Verizon Wireless must prove that its switch serves a geographic area comparable to that served by Ameritech Illinois' tandem switch (the "geographic coverage test"). And, second, Verizon Wireless must prove that its switch performs similar functions on behalf of Ameritech Illinois as Ameritech Illinois' tandem performs on behalf of Verizon Wireless (the "functionality test").

Response to Petition at 9.

Thus, according to Ameritech, "...Verizon Wireless would be entitled to charge the tandem rate if, but only if, the switch for which it seeks to charge that rate serves a geographic area comparable to the area served by an Ameritech Illinois tandem switch *and* performs functions similar to the Ameritech Illinois tandem." Ameritech Direct Testimony (Way) at 13¹⁴.

Ameritech Witness Way, in his direct testimony, characterizes the functional test in terms of the number of times the terminating carrier switches the call. Ameritech Direct Testimony (Way) at 11¹⁵. "Ameritech Illinois believes that Verizon Wireless should recover only the end office rate, primarily because Verizon Wireless' network typically performs only a *single* switching operation when it terminates traffic, and that switching function is akin to an end office switching function." *Id.* at 20.¹⁶ (Emphasis added).

¹⁴ A31.

¹⁵ A30.

¹⁶ Q42-A42.

In applying his characterization of the functionality test to the Verizon network, Ameritech Witness Way describes the function that, in his opinion, the wireless MTSO performs. Id. at 13-20¹⁷. He concludes that the MTSO performs an end-office function, not a tandem function. “In the situation I am describing, where there is only one switching function performed at one Verizon Wireless MTSO, the function is an end office function, for the simple reason that the MTSO is not switching the call to another switch, which is the essence of tandem switching”. Id. at 20¹⁸.

In its Response to Petition, Ameritech argues that two additional criteria exist with respect to the functionality test:

To satisfy the functionality test, Verizon Wireless must (a) give Ameritech Illinois the option to connect directly to Verizon Wireless’ end office function and thus to avoid payment of the tandem rate (and perhaps also the transport rate) if its so chooses, and (b) define its switch and offers [sic] interconnection on a nondiscriminatory basis for both the termination of local traffic by other LECs and the termination of toll traffic by long distance interexchange carriers.

Response to Petition at 11; see, also, Ameritech Direct Testimony (Way) at 20¹⁹.

Staff disagrees with Ameritech that the functionality test requires the satisfaction of these two additional criteria. Notwithstanding Ameritech’s assertion regarding the existence of such criteria, in response to Staff Data Request JZ 1.2, Ameritech acknowledges that there are no statutes, rules, court rulings, or any other sources that directly specify any such criteria. Moreover, such criteria, if established, would require Verizon to virtually duplicate Ameritech’s tandem/end office structure in order to receive

¹⁷ Q34-A42.

¹⁸ Q42-A42.

¹⁹ Q43-A43.

reciprocal compensation at the tandem rate. The FCC rules and orders do not support such criteria nor should they. The establishment of such criteria would discriminate against new, alternative technologies and discourage innovation by permitting the tandem rate to be collected only by carriers using similar architectures to Ameritech's tandem/end office structure. Furthermore, discriminating against alternative architectures is patently anti-competitive. Therefore, Staff recommends that Ameritech's additional and unsubstantiated criteria be rejected.

Staff argues that the networks of Verizon and Ameritech Illinois are significantly different and, therefore, that the two networks cannot be compared on a component by component basis. Verizon concurs with Staff on this point. Tr. at 159-160. In his direct testimony, Staff Witness Zolnierrek recommends that in such circumstances, functional equivalence should be construed broadly. Staff Direct Testimony (Zolnierrek) at 6-8. "...[I]t is neither practical nor necessary to analyze the functionality of the underlying components of two radically different technologies when one technology taken as a whole performs the same overall function as the other, taken as a whole. Id. at 7. For example, from their tandems or MTSOs, Ameritech and Verizon, respectively, each provide voice communications to customers dispersed over roughly equivalent geographic areas. Therefore, broadly construed, analyzing functional equivalence in this instance is actually the same as analyzing geographical coverage and associated dispersion.

However, based on the cross-examination testimony of Ameritech Witness Way and Verizon Witness Murphy, Staff believes that the Commission need not, within this arbitration proceeding, decide whether geographic criteria alone or geographic and functionality criteria together should be the basis for determining the applicable rate.

Based on the testimony of these witnesses, Staff concludes that traffic terminated on the Verizon network satisfies both geographic and functionality criteria, and, therefore, Verizon should be compensated for the additional costs of terminating local calls from Ameritech customers at Ameritech's tandem rate.

As discussed above, Ameritech reasons that the switching function performed by an MTSO is an end office function, not a tandem function "...for the simple reason that the MTSO is not switching the call to another switch, which is the essence of tandem switching." Ameritech Direct Testimony (Way) at 20²⁰. At the hearings, however, Verizon Witness Murphy testified that MTSOs perform more than one switching function and do indeed switch calls to another switch. Tr. at 157-158. Moreover, it is often the case that in a single call, more than one MTSO is involved in switching the call. Tr. at 152-153.

Furthermore, the cross-examination testimony of Verizon Witness Murphy also illustrates that, in the course of transporting and terminating a cellular call, Verizon may reroute the transmission paths used to transport and terminate the cellular call with and without the aid of the serving MTSO. Such rerouting, which both witness Murphy and Way characterize as switching, occurs at the Base Station Controller ("BSC") and the Asynchronous Transfer Mode ("ATM") switch. Tr. at 205, 206, lines 21-22, and lines 1-11. The switching that occurs at the BSC may occur multiple times within a single call even if the party receiving the cellular call remains in a fixed location. Tr. at 157-159, 165.

Based on Mr. Way's characterization of functionality and the testimony of Verizon Witness Murphy, it is evident that, to the extent the two networks can be compared, the functionality of Verizon's MTSO/cell site configuration is at least equivalent to that of

Ameritech's tandem/end office configuration and more than likely performs a greater number of, and more complex, switching functions than Ameritech's tandem switching. Tr. at 160-161,162-163. As a result, the Verizon network satisfies both geographic and functionality criteria, and, therefore, Verizon should be compensated for the additional costs of terminating local calls from Ameritech customers at Ameritech's tandem rate.

In conclusion, Staff recommends that Verizon be entitled to collect reciprocal compensation from Ameritech Illinois for land-to-mobile traffic that is symmetrical to the tandem rate, rather than the end-office rate, charged to Verizon by Ameritech for mobile-to-land traffic. Staff believes that the Commission need not, within this arbitration proceeding, decide whether geographic criteria alone or geographic and functionality criteria together should be the basis for determining the applicable rate. Based on the testimony of both Ameritech and Verizon witnesses, Staff concludes that traffic terminated on the Verizon network satisfies both geographical coverage and functionality test. Verizon should, therefore, be compensated at Ameritech's tandem rate.

Issue No. 7: Calculating CMRS Tandem Rate

Should Ameritech assess common transport charges based upon a median facilities distance of 23 miles or based upon actual charges?

At dispute in Issue 7 is what methodology Ameritech should use in billing Verizon for the tandem transport mileage component of the tandem transport and termination rate. Verizon requests that it be billed based on the actual tandem transport mileage associated with the traffic Ameritech terminates for Verizon. Verizon Direct Testimony (Clampitt) at 29.

²⁰ Q43-A42.

Verizon believes its position is justified because “actual mileage charges for Common Transport will reflect the costs associated with the provision of that service more accurately than estimated mileage charges.” *Id.* Verizon also argues that “[t]he 1996 Act and the FCC’s rules require that transport services be provided at cost-based rates.” *Id.* Finally, Verizon argues that “Common Transport Mileage should be applied consistently across all types of interconnecting carriers.” *Id.*

Ameritech argues that a proxy figure of 23 miles should be used. Ameritech Direct Testimony (Zaccardelli) at 12.²¹ “[T]he application of a mileage factor is appropriate and, under the circumstances, preferable to any available alternative.” *Id.* at 10.²² Although Ameritech concedes that charges based upon actual mileage would be more precise, Ameritech argues that “[y]ou have to consider whether the cost of instituting and maintaining the new system would be justified by the gain in precision.” *Id.* at 13.²³ Ameritech further argues that “[t]here are many circumstances, both in the telecommunications industry and otherwise, where it is appropriate to use a method of *averaging* to develop a standard number for use in a calculation that is made repeatedly, rather than to spend the time and money that would have to be spent to establish and maintain a system to determine the exact number in each individual instance, and this is one of those circumstances.” *Id.* at 16.²⁴ (*Emphasis added.*) Notwithstanding this conclusion regarding the appropriateness of an average, Ameritech, in fact, developed this

²¹ A32.

²² A28.

²³ Q33 and A33.

²⁴ Q39 and A39.

proxy figure of 28 miles by finding a “median” mile, not an average. Id. at 14²⁵; Tr. at 258-260.

Staff disagrees with Ameritech that its use of a proxy factor of 28 miles, derived from developing a median, is appropriate under the circumstances and preferable to any available alternative. Using actual numbers is one available alternative that would be preferable to using an average, and certainly, to using a median figure. Tr. at 339. As Ameritech concedes, actual numbers would be more precise. Furthermore, the fact that there are economic benefits to society of cost-based pricing is axiomatic. Such costs often outweigh the costs of computing cost based rates based on averages or other methodologies. As Staff Witness Zolnierек notes, however, in those cases where using actual costs to determine pricing is cost prohibitive, then it is usually economically efficient to average rates for cost recovery. Staff Direct Testimony at 9.

Ameritech Witness Zaccardelli testifies that the costs of deaveraging transport mileage rates (i.e., using actual mileage figures) are neither prohibitive, nor so costly as to be impractical. Tr. at 265-267, 336. This is true despite Witness Zaccardelli’s direct testimony that its current billing systems, used to bill wireless carriers for reciprocal compensation, are not designed to bill wireless carriers based on actual tandem transport mileage. Ameritech Direct Testimony (Zaccardelli) at 13-16.²⁶ This apparent inconsistency in Ameritech’s testimony is resolved by the fact that, unlike Verizon, other parties to interconnection agreements with Ameritech, have accepted the proxy figure. Tr. at 268. Thus, Ameritech has apparently never seriously considered revising its method of billing.

²⁵ Q35 and A35.

²⁶ Q34-A39.

Indeed, Ameritech places no evidence in this record regarding the costs that it would have to incur in order to change its billing systems to charge based on actual mileage. Tr. at 267. As Ameritech Witness Zaccardelli states, “if this was acceptable, why would you find another—or do something else?” Id.

Notwithstanding the above, Ameritech does in fact currently bill CLECs and Interexchange Carriers for tandem transport based on actual mileage. Moreover, Michigan Bell bills wireless carriers for tandem transport based on actual mileage. See, Ameritech’s responses to Staff Data Request JZ 1.3 Pars. A) and D). “These facts imply that it is feasible to deaverage billing for tandem transport mileage.” Staff Direct Testimony at 9. Furthermore, these examples of actual mileage billing that Ameritech currently undertakes indicate that the benefits of deaveraging likely outweigh the costs to do so in this instance. Therefore, Staff recommends that Ameritech institute a billing system to bill Verizon for transport mileage based on actual mileage rather than Ameritech’s 23 mile proxy figure.

Ms. Zaccardelli explains that the 23 mile figure advocated by Ameritech is based on a 1996 study of traffic flows between all wireless carriers and Ameritech. Ameritech Direct Testimony (Zaccardelli) at 13-14²⁷; Tr. at 259. She also testifies that the 23 mile figure is a reasonable approximation of actual costs. Ameritech Direct Testimony (Zaccardelli) at 13-14.²⁸ Ms. Zaccardelli however, acknowledges that she had no direct involvement in the calculation of the figure and cannot speak to all details of the study. Tr. at 263. Moreover, she acknowledges that the 23 mile proxy figure does not relate to any specific carrier’s

²⁷ A34-A35.

²⁸ A34-A35.

experience. Tr. at 249-250. Consequently, Staff questions the reliability of her testimony on this issue.

Regardless of Ms. Zaccardelli's qualifications to provide evidence on this issue, Staff finds fault with the 23 mile proxy figure for numerous reasons. First, as was pointed out at the hearings, despite references to the contrary set forth in Ameritech's direct testimony and Response to Petition, the 23 mile proxy figure Ameritech proposes to use is a number derived by obtaining a median, not an average. Tr. at 258-260. Staff contends that using a median figure to "average" rates is decidedly not standard practice in telecommunications and for good reason. As Staff witness Zolnierek indicates at the hearings, medians and averages typically vary widely in telecommunications, even for extremely large populations of data, and rates based on medians will either over-recover or under-recover costs depending on how the median differs from the average. Tr. at 339.

Second, it is generally and unequivocally recognized that wireless usage has increased dramatically since 1996. Tr. at 282-284. Such large increases in usage very likely have caused the median figure to change since 1996. In addition, depending on the distribution of transport miles within the customer usage area, such increase in wireless usage may well create a greater disparity between the actual mileage and median mileage. Tr. at 286-287, 365. Therefore, despite Ameritech's inability to present a company representative familiar with the calculation of the 23 mile figure, there is substantial evidence in this proceeding to indicate that, as a median (as opposed to an average), calculated over four years ago, it is an improper and inaccurate pricing methodology. Tr. at 339.

Staff notes that, in the event that actual mileage is significantly different than median mileage, billing based on actual mileage may result in substantial benefits to wireless end-users. Ameritech's own witness in this proceeding has testified that billing based on actual costs would not be prohibitively expensive. Therefore, Staff proposes a system of continuing mileage studies that could be employed in the event that Ameritech finds, in contrast to its own witnesses testimony, that billing based on actual mileage is prohibitive. Staff Direct Testimony (Zolnierrek) at 10-11. While conceding that there are costs involved with studying traffic, Staff notes that these costs are most certainly less than the costs associated with billing inaccuracies suggested by Ameritech's 23 mile median figure.

Based on the above, Staff recommends that the 23 mile figure be used at the commencement of the interconnection agreement and that Ameritech conduct a new tandem transport mileage study, based on actual traffic flows occurring after the effective date of the agreement between itself and Verizon. Staff recommends that this study be fully documented with descriptions of the methodology and data used and that all results and documentation be completed and provided to Verizon within six months after the effective date of the agreement.²⁹

Staff further recommends that at the culmination of the study, a new average mileage figure applicable to Verizon be instituted based on the actual data reported and reciprocal compensation payments between Ameritech and Verizon be trued up, based on

²⁹ Because Ameritech may be billing Verizon customers for mileage that exceeds actual tandem transport mileage for calls originated on the Verizon network and terminated on the Ameritech network, and because Ameritech will receive no direct benefits from remedying this situation, Ameritech has no incentive to amend its billing processes. In the event that Ameritech fails to meet the 6 month deadline, Staff recommends that the 23 mile average figure be reduced by 44% or 10 miles to 13 miles and that the 13 mile average figure apply for the period beginning with the commencement of this agreement and culminating with the date upon which the study is completed and a new average mileage figure is instituted.

the difference between the 23 mile average and the average that results from the study, for the period beginning with the commencement of this agreement and culminating with the date upon which the study is completed and such a new average mileage figure applicable is instituted. Finally, Staff recommends that the study be updated in a similar manner every twelve months until such time as Ameritech Illinois is able to implement a billing system, using actual mileage, similar to that implemented for other local exchange carriers.³⁰

Staff suggests that in the event that Ameritech does not institute billing based on actual mileage and also does not perform the aforementioned usage studies, that the proxy figure presented by Ameritech be reduced by 44%. This 44% represents the reduction in tandem transport mileage Verizon asserts it received when Michigan Bell began billing Verizon based on actual mileage. Much was made at the hearings that this figure is unsubstantiated, other than through the verified statements of Verizon's witness. Tr. at 340-344.

In response, Staff notes, however, two points. First, while the Ameritech 23 mile median, which was allegedly calculated based on Ameritech's experience with numerous wireless carriers, is unverifiable by Verizon and, even if verifiable, is at least four years old, the 44% figure presented by Verizon was verifiable by Ameritech. Ameritech's counterpart in Michigan is also a subsidiary of SBC, Ameritech's parent company and, although Ameritech and Michigan Bell are not the same entities, they obviously have some ability to exchange information. This ability is highlighted by the fact that Ameritech uses as one of

³⁰ Although Ameritech Witness Zaccardelli has testified that instituting actual billing may not be cost prohibitive, her expressed general unfamiliarity with cost considerations may call her testimony on this matter into question. Therefore, should instituting a system of billing based on actual tandem transport

its main witnesses in this proceeding, a witness, Ameritech Witness Way, that is currently employed by Michigan Bell Telephone Company. Tr. at 172. Ameritech had ample opportunity to refute Verizon's 44% figure but chose not to do so.

Second, even if this 44% figure is inaccurate (and assuming it is inaccurate in favor of Verizon), it is a temporary figure to be used only in the event Ameritech fails to provide the cost studies Staff recommends and only for so long as that failure continues. If this figure is unfavorable to Ameritech, it should provide the requisite incentive for Ameritech to comply with Staff's recommendations in a timely manner. Therefore Staff recommends this figure as a pragmatic solution, particularly given that it will only become relevant if Ameritech fails to meet in a timely manner both implementation of billing based on actual mileage and billing based on the mileage studies outlined above.

In conclusion, Staff recommends that, with respect to Issue 7, Ameritech institute billing for the tandem transport component of its tandem termination rate based on actual mileage. Billing based on actual mileage may result in substantial benefits to Verizon's end-users. Ameritech witness Zaccardelli's testimony, indicating that billing based on median mileage is the product of tradition rather cost prohibitions associated with upgrading Ameritech's billing system, supports the conclusions that such benefits will outweigh any costs to Ameritech or its customers associated with instituting billing based on actual mileage. Recognizing that modification of Ameritech's billing system will take time, Staff proposes the interim solution more fully discussed above.

mileage prove cost prohibitive, staff recommends continuing indefinitely to allow Ameritech to update its Verizon Wireless mileage studies as outline above.

Issue No. 10: Transiting Rates

Verizon contends that Ameritech utilizes the tandem as the primary vehicle in its own network to route calls between its end offices and rural telcos, wireless, and competitive carriers. Verizon believes that “transiting” is local interconnection and that the pricing should reflect forward-looking rates. Petition for Arbitration at 41. Ameritech asserts that the “Telecommunications Act of 1996 does not require the rates that Ameritech Illinois charges for transit service to be cost-based, but that its transit rates are cost based anyway.” Ameritech Direct Testimony Rita Zaccardelli at 20.³¹.

As Staff witness Jim Zolnierek pointed out in his verified statement “Ameritech's tariffed rates for tandem switching for local traffic that Ameritech terminates differs from Ameritech's tariffed rates for tandem switching for local traffic that transits Ameritech's network. Tandem switching rates are \$0.001072. The rate for calls that Ameritech terminates and transits is \$0.004836.” Verified Statement of Jim Zolnierek at 12. Staff requested Ameritech to explain the difference in the components of the rates. Id. at lines 247-251. “Staff would support rates based upon actual costs if the cost basis was sufficiently supported by the record.” Id. Staff specifically requested that Ameritech have someone at the hearing who could explain the rates. Id.

At the hearing Ameritech witness Ms Zaccardelli was cross examined on transiting rates. Tr. at 270-272. Ms. Zaccardelli, who asserted in her direct testimony that the rates Ameritech charges are cost based, was asked if she could explain the difference in transit and termination tandem switching costs. Tr. at 270 Lines 13-14. Ms. Zaccardelli

³¹ A46

responded, "I cannot explain the cost, no. I don't know what costs were submitted. I'm not a costing person." Tr. at 270 lines 15-17. Attorney Dennis Friedman for Ameritech testified at the hearing that, "even though Staff asked for Ameritech Illinois to produce a witness who could testify on the cost matters, they have not done so." Tr. at 272 lines 8-15.

On cross examination, Staff witness Jim Zolnierек restated his position set forth in his verified statement: "I did not take the position because I felt I did not have enough information, I simply asked Ameritech to explain the difference in rates, ...but they did not do so." Tr. at 358-359 lines 1-11. "[W]hy [is] there a difference between the rates for what appear to be on the surface exactly the same thing. I was hoping Ameritech would shed some light on that so I could form an opinion why the difference in rates would be appropriate. Apparently Ms. Zaccardelli couldn't speak to that. So I have no information in which to form an opinion on." Tr. 364 lines 1-9.

Staff made numerous attempts to query Ameritech about the seeming anomalies between transit and termination tandem switching costs, yet, Ameritech was non-responsive. Again, as Staff pointed out in Issue 1 (C) (*infra*), Staff believes this is a case where Ameritech failed to provide necessary information for the Commission to reach a decision on an unresolved issue. Pursuant to Section 252 (b)(4)(B) of the Telecommunications Act of 1996,

"[t]he State commission may require the petitioning and the responding party to provide such information as may be necessary for the State commission to reach a decision on the unresolved issues. If any party refuses or fails unreasonably to respond on a timely basis to any reasonable request from the State commission, then the State commission may proceed on the basis of the best information available to it from whatever source derived."

In this instance, Ameritech failed to provide any justification for its position. Based on what information is available Staff does not see a justification for the difference in the rates. Therefore, pursuant to Section 252(b)(4)(B) of the 1996 Act, the Commission must proceed on the basis of the best information available .

V. CONCLUSION:

For all of the foregoing reasons, we request the Hearing Examiners accept Staff's recommendations in their entirety as set forth herein.

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Respectfully submitted,

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