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VERIZON WIRELESS)
)
Petition for Arbitration Pursuant to)
Section 252(b) of the Telecommunications) **Docket 01-0007**
Act of 1996 to Establish an Interconnection)
Agreement with Illinois Bell Telephone)
Company d/b/a Ameritech Illinois)

**AMERITECH ILLINOIS' AMENDED
SUBMISSION OF PROPOSED HEPAD LANGUAGE**

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Illinois Bell Telephone Company ("Ameritech Illinois"), pursuant to the Hearing Examiners' direction, hereby submits proposed HEPAD language for the issues in this matter. For each issue, Ameritech Illinois sets forth Verizon Wireless' position; Ameritech Illinois' position; Staff's position (if any); and then a proposed Analysis and Conclusion.

Issue 1.A: Direct Trunking

Whether the parties' Agreement, should include, as section 5.4.4, the following provision:

If the traffic from a single Carrier MSC through any Telco Tandem Switch destined for any specific other Telco switch or third party switch at any time during each month of a three month period requires 24 or more fully utilized Trunks (24 fully utilized Trunks shall be deemed for purposes of this Agreement, to consist of 864 CCS, per ERLANG B Capacity Table, during the Carrier busy hour), then (a) in instances where the traffic is destined for a Telco switch, the Carrier shall, within sixty (60) Days establish a two-way (where such is available) direct End Office Trunk Group to Telco end office; and (b) in instances where the traffic is destined for a third party switch, Carrier shall exercise best efforts to establish direct interconnection with that third party within sixty (60) Days or as soon thereafter as possible, and thereby to cease transiting through Telco's Tandem Switch traffic destined for that third party switch.

Verizon Wireless' Position

Verizon Wireless desires to and should be permitted to interconnect at Ameritech Illinois' tandems or end offices in the manner Verizon Wireless considers most efficient and economical. The parties' Agreement should not require Verizon Wireless to establish direct trunking to an Ameritech Illinois end office, or to establish direct connection with a third party carrier, based upon the volume of Verizon Wireless traffic to that end office or third party carrier reaching an arbitrary level specified by Ameritech Illinois.

Ameritech Illinois' Position

A tandem switch is said to be exhausted when it can no longer accommodate additional trunks. Tandem exhaust should be avoided, or at least deferred for as long as possible, because

when a tandem is exhausted, a new tandem must be installed, at a cost of ten to fifteen million dollars. This cost is borne not only by Ameritech Illinois and, ultimately, its customers, but also by all carriers in Illinois that pay cost-based rates for interconnection with Ameritech Illinois' network.

There is a significant and growing problem of tandem exhaust on Ameritech Illinois' network. For example, of the eight tandems in the Illinois portion of the Chicago LATA, three are at 100% capacity, two are at 96% capacity, and the other three are between 70% and 80% capacity.

To help alleviate tandem exhaust, Verizon Wireless should establish direct trunking between its switch and an Ameritech Illinois end office when the volume of traffic that that Verizon Wireless switch is routing to that Ameritech Illinois end office reaches one DS-1, i.e., the equivalent of twenty-four trunks. For the same reason, Verizon Wireless should establish direct trunking to any third party carrier to which its switch is sending traffic that transits Ameritech Illinois' tandem when the volume of that traffic reaches one DS-1.

Staff's Position

Staff believes that Ameritech Illinois' proposed section 5.4.4 is generally reasonable, but points out that there may be other reasonable means of establishing the proposed trunk groups.

Analysis and Conclusion

We will approve Ameritech Illinois' proposed section 5.4.4, modified as explained below. The record is clear that tandem exhaust is a significant problem for Ameritech Illinois' public switched network. Tandem switches are a key component of the network. Their principal function is to receive telecommunications traffic on incoming trunks and to route (switch) that

traffic along the network, including to the end office switches that terminate the traffic to the called party.

The points at which trunks attach to the switch are called "ports." Each tandem switch has a finite number of ports, and can therefore accommodate a finite number of trunks. When a tandem can accommodate no more trunks, it is said to be exhausted. The only way Ameritech Illinois can provide for continued growth on the network when its tandems are exhausted is to purchase and install an additional tandem.

We agree with Ameritech Illinois that addition of new tandems should be deferred for as long as possible, and therefore that it is in the public interest to take appropriate measures to alleviate the problem of tandem exhaust. A new tandem costs on the order of ten to fifteen million dollars. In the first instance Ameritech Illinois, and thus its end user customers, bear that cost. Ultimately, however, the cost is borne by all the carriers that use the public switched network, and their end user customers, because the cost is reflected in the cost-based rates that those carriers pay to use the network. Moreover, the addition of a new tandem imposes another cost, above and beyond the cost of the tandem itself, because carriers must establish new trunk groups to interconnect with the new tandem and must coordinate routing changes that are required for both the new and the already existing trunk groups.

Also, the addition of new tandems is a process of diminishing returns, because each new tandem adds less capacity than the one before. This is because each tandem in a LATA must be interconnected with every other tandem in the LATA; consequently, a higher and higher percentage of the ports that each new tandem adds to the network must be devoted to connections to tandems that are already in place. By the time a ninth or tenth tandem is added in a LATA, only about ten percent of the tandem's capacity is actually available for new traffic. Thus, the

problem of tandem exhaust cannot be solved by adding one new tandem after another. Rather, the problem must be addressed by reducing the load (i.e., the number of trunk connections) on tandems before they reach the point of exhaust.

It is uncontested that tandem exhaust is a problem for Ameritech Illinois today. Even though Ameritech Illinois has added five tandems to its network in the last 4½ years, Ameritech Illinois' tandems are in large part at capacity. For example, of the eight tandems in the Illinois portion of the Chicago LATA, three are at 100% capacity; two are at 96% capacity; and the other three are between 70% and 80% capacity. Given the causes of the problem – requirements for interconnection with new carriers; increased interconnection demands by existing carriers; and growing demand for trunks for data traffic – there is every reason to believe the problem will continue to get worse.

Ameritech Illinois' proposed section 5.4.4 would require Verizon Wireless to establish direct trunking between a Verizon Wireless switch and an Ameritech Illinois end office when the Verizon Wireless switch is sending the threshold volume of traffic to that end office. Likewise, section 5.4.4 would require Verizon Wireless to establish direct trunking to a third party carrier when a given Verizon Wireless switch is sending the threshold volume of traffic to that carrier. By definition, these measures will help prevent tandem exhaust, because direct trunking means taking trunks off the tandem. Staff witness Murray confirmed that direct trunking could relieve the potential for tandem exhaust.

Ameritech Illinois' proposed section 5.4.4 does not single out Verizon Wireless for special treatment. On the contrary, Ameritech Illinois asks all CLECs and wireless carriers to implement direct end office trunking. In addition, Ameritech Illinois establishes direct end office trunking on its own network (i.e., puts in place trunks to carry traffic from one Ameritech Illinois

one end office to another, thus by-passing the tandem) in order to alleviate the tandem exhaust problem, and in fact imposes on itself a more demanding requirement than it is asking the Commission to impose on Verizon Wireless. Where proposed section 5.4.4 uses 24 trunks (one DS-1) as the trigger point for Verizon Wireless, Ameritech Illinois itself establishes direct end office trunking when the volume of traffic between two of its end offices is only 18 trunks, and is in the process of changing that threshold to 12 trunks in the Chicago LATA.

Verizon Wireless does not dispute that there is a significant tandem exhaust problem on Ameritech Illinois' network, or that Ameritech Illinois' proposed direct trunking requirement would help solve the problem. Nonetheless, Verizon Wireless objects to proposed section 5.4.4. For the most part, we find Verizon Wireless' objections unpersuasive.

Verizon Wireless witness Clampitt initially objected to the direct trunking requirement as Ameritech Illinois originally proposed it on the ground that it was not based upon the volume of traffic from one Verizon Wireless switch to one Ameritech Illinois end office, but rather was based upon all Verizon Wireless traffic regardless of where it originates in the Verizon Wireless system throughout Illinois. Verizon Wireless repeated this objection in its initial post-hearing brief. This objection, however, while pertinent to section 5.4.4 in its original form, does not apply to section 5.4.4 as Ameritech Illinois now proposes it, because the trigger point for direct trunking in the provision as now proposed is based upon the traffic from a single Verizon Wireless switch. Mr. Clampitt acknowledged at hearing that revised section 5.4.4 eliminates his concern about where on the Verizon Wireless network the traffic originates.

Verizon Wireless' principal objection to section 5.4.4 is that it would thwart Verizon Wireless' ability to determine unilaterally the manner in which it will interconnect with Ameritech Illinois' network. Verizon Wireless states that it desires to interconnect in the manner

that it considers most economical and efficient, and contends that the FCC's Rules, particularly 47 C.F.R. § 305 and paragraph 209 of the FCC's *First Report and Order*, entitle Verizon Wireless to deliver traffic to Ameritech Illinois at any technically feasible point on Ameritech Illinois' network.

To the extent that section 5.4.4 pertains to Verizon Wireless traffic that transits Ameritech Illinois on its way to third party carriers (as opposed to Verizon Wireless traffic destined for an Ameritech Illinois end office), Verizon Wireless' reliance on its entitlement to interconnect at any technically feasible point is misplaced. If Verizon Wireless has a point of interconnection at an Ameritech Illinois tandem switch and the conditions set forth in section 5.4.4 are met *with respect to transit traffic*, so that Verizon Wireless has to take traffic off the tandem and establish a direct connection with the third party carrier, there will be no change in the location of Verizon Wireless' point of interconnection with Ameritech Illinois. Verizon Wireless' point of interconnection with Ameritech Illinois network will remain exactly where it is – at the tandem switch – and Verizon Wireless will not be establishing any new or different point of interconnection with Ameritech Illinois' network. Thus, Verizon Wireless' arguments about its rights with respect to points of interconnection have no bearing on Issue 1.A insofar as it concerns traffic flowing from Verizon Wireless to third party carriers.

Verizon Wireless' arguments are, however, relevant to the extent that section 5.4.4 pertains to Verizon Wireless traffic that is routed from an Ameritech Illinois tandem to an Ameritech Illinois end office. While it is undisputed that Verizon Wireless may generally interconnect with Ameritech Illinois at any technically feasible point, however, that right is not absolute and unfettered. Rather, as Staff points out, there must be a "balancing" determination

between Ameritech Illinois' ability to protect its network and placing unreasonable inhibiting competitive requirements on Verizon. We agree with Staff.

Staff goes on to endorse section 5.4.4, but with the proviso that section 5.4.4 should be modified to reflect that Verizon is not 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. Ameritech Illinois states that it accepts the concept behind Staff's proviso, so long as it is made clear that when Staff says "tandem" in this instance, it does not mean "tandem switch" but rather "tandem building," so that the effect of Staff's proviso is to clarify that that Verizon Wireless will not be required to establish direct trunking from its switch to Ameritech Illinois' end office in instances where facilities exist that will permit Verizon Wireless to go to a point of interconnection at Ameritech Illinois tandem building and then connect to the Ameritech Illinois end office without going to the tandem switch. We share Ameritech Illinois' understanding of Staff's proviso, and incorporate the proviso into our resolution of this issue.

The time period within which direct trunking must be established after the trigger point in section 5.4.4. has been reached was the subject of extensive discussion by the parties and Staff. As presented by Ameritech Illinois, section 5.4.4 would require Verizon Wireless to establish direct trunks to an Ameritech Illinois end office within 60 days after the trigger point has been reached, and to exercise best efforts to establish direct interconnection with a third party carrier within sixty (60) Days or as soon thereafter as possible after the trigger point has been reached. In light of the "best efforts" and "or as soon thereafter as possible" language in the portion of the section that governs direct connections with third parties, that portion of the section is clearly reasonable, and Verizon Wireless does not appear to disagree.

With respect to the establishment of direct trunking to Ameritech Illinois end offices, however, Verizon Wireless witness Clampitt suggested that Verizon Wireless should have 180 days starting on the Effective Date of the Agreement to establish direct connections in all instances where the trigger point has been met as of the Effective Date, and that other than those initial direct connections, it would be reasonable for the Agreement to require both parties to use their best efforts to implement direct connections within 60 days, with implementation in no instance to take longer than 120 days. The reason Mr. Clampitt proposed a longer period to implement the initial direct connections is that Verizon Wireless might find itself on the Effective Date with an obligation to establish multiple direct connections, in which event it would need the additional time to accommodate the multiple projects.

We believe Verizon Wireless' proposal for a longer period to establish direct end office trunking at the beginning of the term of the Agreement is, in theory, reasonable, but it is not clear from the record that Verizon Wireless will in fact be faced with the need to establish direct end office trunking to multiple Ameritech Illinois end offices. In addition, we believe it preferable for the Agreement to require Verizon Wireless to use best efforts to accomplish the task within a somewhat shorter period than to require Verizon Wireless absolutely to accomplish the task within a longer period. Accordingly, we resolve the timing question as reflected in the language set forth below.

For the foregoing reasons, the Agreement will include the following section 5.4.4, with the underscored language indicating modifications to the language as originally proposed by Ameritech Illinois:

If the traffic from a single Carrier MSC through any Telco Tandem Switch destined for any specific other Telco switch or third party switch at any time during each month of a three month period requires 24 or more fully utilized

Trunks (24 fully utilized Trunks shall be deemed for purposes of this Agreement, to consist of 864 CCS, per ERLANG B Capacity Table, during the Carrier busy hour), then (a) in instances where the traffic is destined for a Telco switch, the Carrier shall exercise best efforts to establish within sixty (60) Days a two-way (where such is available) direct End Office Trunk Group to Telco end office (provided, however, that said period shall be one hundred twenty (120) Days in all instances where Carrier's duty to to establish a direct End Office Trunk Group is triggered as of the Effective Date of this Agreement); and (b) in instances where the traffic is destined for a third party switch, Carrier shall exercise best efforts to establish direct interconnection with that third party within sixty (60) Days or as soon thereafter as possible, and thereby to cease transiting through Telco's Tandem Switch traffic destined for that third party switch. Provided, however, that where facilities exist that will permit Verizon Wireless to deliver traffic to a point of interconnection at Ameritech Illinois' tandem building and for its traffic then to be delivered to the Ameritech Illinois end office without going through the tandem switch, Carrier shall not be required to establish a direct End Office Trunk Group, but may instead deliver its traffic to such point of interconnection at the Ameritech Illinois' tandem building.

Issue 1.C: Points of Interconnection

Verizon Wireless' Position

The parties' agreement should identify, in sections 2.1.7.5, 2.1.7.6 and 2.1.7.7 respectively, central office cross-connect points, out-of-band signaling transfer points, and points of access to unbundled network elements as technically feasible points of interconnection.

Ameritech Illinois' Position

Although Ameritech Illinois previously opposed Verizon Wireless' proposed language for sections 2.1.7.5, 2.1.7.6 and 2.1.7.7, Ameritech Illinois agreed in its initial post-hearing brief to the identification of central office cross-connect points, out-of-band signaling transfer points, and points of access to unbundled network elements as technically feasible points of interconnection, so long as the language used to identify those points of interconnection exactly tracks the FCC's language in 47 C.F.R. § 51.305.

Staff's Position

Staff concurs that the parties' agreement should identify all six technically feasible points of interconnection identified in 47 C.F.R. § 51.305.

Analysis and Conclusion

Issue 1.C no longer presents any disagreement for the Commission to resolve. It is clear from the parties' briefs that the parties have agreed to identify cross-connect points, out-of-band signaling transfer points, and points of access to unbundled network elements as technically feasible points of interconnection in sections 2.1.7.5 through 2.1.7.7 of their Agreement. The parties have also agreed, as reflected in Verizon Wireless' reply brief, that those sections will quote verbatim from the corresponding sub-paragraphs of 47 C.F.R. § 51.305, and will not include the additional verbiage that Verizon Wireless initially proposed.

We also note that Issue 1.C previously comprised disputed language for section 2.1.6 of the Agreement, and that Verizon Wireless addressed that language in its initial post-hearing brief. The transcript of the March 8-9 hearing (at pages 23-25), makes clear, however, that Verizon Wireless had accepted Ameritech Illinois' proposed language for section 2.1.6 well before the hearing began.

Thus, the parties have resolved their previous differences over the language for sections 2.1.6 and 2.1.7 (see also Issue AIT-1 below), and we expect the parties to carry through on their resolutions of those differences.

Issue 4: Reciprocal Compensation Rate To Be Charged By Verizon Wireless
Verizon Wireless' Position

Verizon Wireless believes it is entitled to collect reciprocal compensation from Ameritech Illinois for land-to-mobile traffic at a rate that is symmetrical to the tandem rate charged to Verizon Wireless by Ameritech Illinois for mobile-to-land traffic, pursuant to the geographic coverage test established in paragraph 1090 of the FCC's *First Report and Order* and 47 C.F.R. § 51.711(a)(3). Verizon Wireless believes there is no requirement for it to show that it meets a test for functional similarity. Verizon Wireless also argues that it is not under an obligation to conduct a cost study unless it chooses to do so.

Ameritech Illinois' Position

Ameritech Illinois does not contest that Verizon Wireless' MTSOs satisfy the geographic coverage test, but maintains that Verizon Wireless is entitled to charge Ameritech Illinois only the end office reciprocal compensation rate, and not the higher tandem rate, because Verizon Wireless' MTSOs do not perform functions similar to the functions performed by Ameritech Illinois tandem switches.

Staff's Position

Staff believes that Verizon Wireless should be permitted to collect reciprocal compensation from Ameritech Illinois for land-to-mobile traffic at a rate symmetrical to the tandem rate, rather than the end office rate, charged to Verizon Wireless by Ameritech Illinois for mobile-to-land traffic. Staff believes that the Commission need not decide in this arbitration whether a requesting carrier must satisfy both the geographic coverage test and the functional similarity test in order to qualify to charge the tandem rate, because, based on the testimony of

Verizon Wireless' and Ameritech Illinois' witnesses, Staff believes Verizon Wireless has satisfied both tests.

Analysis and Conclusion

Our starting point for the resolution of Issue 4 is section 252(d)(2) of the 1996 Act. Section 252(d)(2) establishes the pricing standard for reciprocal compensation – both Ameritech Illinois' reciprocal compensation rate and Verizon Wireless' reciprocal compensation rate. Section 252(d)(2) provides that reciprocal compensation is to

- (i) . . . 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 (emphasis added); and
- (ii) . . . determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

As the italicized language makes clear, Verizon Wireless' reciprocal compensation rate is to compensate Verizon Wireless for the costs it incurs when it transports and terminates traffic that originates on Ameritech Illinois' network. Our resolution of Issue 4, therefore, must be guided by the ultimate objective: a rate that fairly compensates Verizon Wireless for those costs.

The FCC, however, promulgated a rule (the "symmetricality" rule) that allows Verizon Wireless to charge Ameritech Illinois reciprocal compensation based on Ameritech Illinois' rates. (47 C.F.R. § 51.711(a).) But Verizon Wireless does not have to charge based on Ameritech Illinois' rates. Verizon Wireless has the right, under 47 C.F.R. § 51.711(b), to prove its actual transport and termination costs, and to base its reciprocal compensation rate on those costs. Verizon Wireless has elected not do so, however, but instead has chosen to avail itself of its right under Rule 51.711(a) to base its rates on Ameritech Illinois' costs.

The parties agree that the symmetrical rate that Verizon Wireless is entitled to charge Ameritech Illinois is either the Ameritech Illinois tandem rate or the Ameritech Illinois end office rate. The parties disagree as to the test the Commission should apply in order to determine which of those rates Verizon Wireless should charge. Ameritech Illinois maintains Verizon Wireless must demonstrate both that its MTSOs serve geographic areas comparable to the areas served by Ameritech Illinois' tandem switches ("geographic coverage test") and that its MTSOs perform functions similar to the functions performed by Ameritech Illinois' tandem switches ("functional similarity test"). Verizon Wireless maintains it must satisfy only the geographic coverage test. Staff suggests that the Commission need not resolve that disagreement in this arbitration, because Verizon Wireless satisfies both tests.

Our precedents, however, resolve the parties' disagreement about the governing test. In the first arbitration we conducted under the 1996 Act, Docket 96 AB-001, we held:

[The FCC's rule] provides that the tandem interconnection rate should be used if the competitive local exchange carrier's switch "serves a geographical area comparable to the area served by the incumbent LEC's tandem switch." States are also instructed to consider whether new technologies . . . *perform functions similar to those performed by an incumbent LEC's tandem switch.*"

. . . . The FCC's rule is based on the geographic area served by, *and the technological functionality of*, the competitive carrier's switch.

Later, in an arbitration between Ameritech Illinois and MCI, we summarized our decision in the TCG arbitration, stating that we there "concluded that TCG [was] entitled to the tandem switched termination rate because it switch serves a geographic area comparable to the area served by Ameritech Illinois' tandem switch, *and performs the same functions as a tandem switch.*" (Arbitration Decision, Docket No. 96-AB-006, at 10.)

Moreover, we note that Staff, just last year, affirmatively endorsed application of the functionality test, as well as the geographic coverage test in the situation presented here by

Issue 4. In the Focal/Ameritech Illinois arbitration (Docket 00-0027), as we observed, “Staff agrees with Ameritech that Focal must meet both a geographic and system functionality test before being granted the opportunity to receive reciprocal compensation at the tandem rate for the transport and termination of local traffic.” Arbitration Decision, Docket 00-0027 (May 8, 2000), at 6-7.

Thus, this is not an issue on which we are being asked to break new ground. We reaffirm our previous holdings that in order to establish its entitlement to charge reciprocal compensation at the Ameritech Illinois tandem rate, rather than the Ameritech Illinois end office rate, a competing carrier must establish both that the switch for which it seeks that rate serves a geographic area comparable to an Ameritech Illinois tandem, and that that switch performs functions similar to an Ameritech Illinois tandem.

Verizon Wireless established with abundant evidence that its switches satisfy the geographic coverage test. Staff agrees, and Ameritech Illinois does not appear to dispute the point. Thus, the question becomes whether Verizon Wireless’ switches satisfy the functional similarity test.

The functional similarity test is not a bright line test. Neither the FCC’s Rules nor any other controlling law that we are aware of tells us in precisely what respects or to what extent the functions performed by Verizon Wireless’ MTSOs must be similar to the functions performed by Ameritech Illinois’ tandems in order to pass the test. Indeed, Staff suggests that Verizon Wireless’ network and Ameritech Illinois’ network are so different that a comparison of the functionality of Verizon Wireless’ MTSOs with the functionality of Ameritech Illinois’ tandems may be impossible. In light of that consideration, as well as the abundant but conflicting

evidence on both sides of the question, the factual determination that we must make is not free from doubt.

As we approach the question, however, we bear in mind the statutory directive with which we began our analysis: Section 252(d)(2) of the 1996 Act entitles Verizon Wireless to be compensated for its costs of terminating traffic that originates on Ameritech Illinois' network, but not to be over-compensated for its actual (forward looking) costs. The tests we are applying – the FCC's symmetry rule (47 C.F.R. § 51.711(a)) and the geographic coverage and functional similarity tests of paragraph 1090 of the FCC's *First Report and Order* – were promulgated to implement section 252(d)(2), not to yield a result that would depart from section 252(d)(2).

As Verizon Wireless witness Murphy acknowledged, Verizon Wireless knows that if its transport and termination costs were higher than Ameritech Illinois', it could charge reciprocal compensation based on those higher costs by proving them. And Verizon Wireless knows how to do a cost study to show its transport and termination costs, as Mr. Murphy also acknowledged. To be sure, Verizon Wireless is not required to conduct a cost study, as Verizon Wireless emphasizes; Verizon Wireless is absolutely entitled to demand the symmetrical compensation provided for in FCC Rule 51.711. Faced with the conflicting evidence on the factual question whether Verizon Wireless qualifies for the tandem rate, however, we believe it is reasonable to take into account an inference that would seem to follow directly from Verizon Wireless' election not to submit a cost study: Verizon Wireless believes that its transport and termination costs are lower than Ameritech Illinois'. Otherwise, Verizon Wireless' decision not to submit a cost study would be economically irrational. With this consideration in mind, we believe it is appropriate for us to look squarely to Verizon Wireless to bear the burden of providing its case,

not to Ameritech Illinois to disprove it. Having thoroughly reviewed the evidence of record, of which there is an abundance on both sides of the issue, we conclude that Verizon Wireless has not carried its burden.

We do not rehash here all of the relevant evidence the parties submitted, but instead focus on what we find to be the principal failing in Verizon Wireless' case. The quintessential function of a tandem switch is the switching of traffic from trunk to trunk, i.e., connecting one switch to another. Staff witness Murray agreed that a "tandem switch has as its basic function to receive traffic coming in on trunk groups from other switches and to route traffic on to switches." The FCC – the agency whose reciprocal compensation rules the Commission is implementing here – says the same thing:

The tandem switching functionality network element is defined as (i) trunk-connect facilities . . . [and]; (ii) *the basic switching function of connecting trunks to trunks*

(47 C.F.R. § 51.319(c)(2) (emphasis added).)

Whatever else they may do, Verizon Wireless' MTSOs' essential function is not to connect trunks to trunks or, typically, switches to switches. We say "typically" because there are circumstances in which, as explained by Verizon Wireless witness Clampitt, Verizon Wireless' base station controllers perform a switching function, namely, when the Verizon Wireless customer to whom the call is being terminated is actually mobile, in which event the base station controller may be called upon to transfer the call from one cell site to another – or to another base station controller. For such calls, Verizon Wireless may be entitled to tandem compensation under the FCC's rules, because, for such calls, Verizon Wireless' MTSO is arguably performing the essential tandem function of connecting two switches. Verizon Wireless is not, however, entitled to the tandem reciprocal compensation rate for calls that it terminates to customers that

are not on the move during the course of the call, because its MTSO does not perform trunk-to-trunk switching for such calls. And since Verizon Wireless is claiming the benefit of the tandem rate, it was Verizon Wireless' burden to show what percentage of its traffic is terminated to customers who are actually mobile during the course of the call, so that we might award Verizon Wireless the tandem rate on that percentage of its traffic (or a blended rate on all traffic it terminates, based on that percentage). Absent such a showing, Verizon Wireless would be over-compensated, in violation of section 252(d)(2) of the 1996 Act, if the Commission were to award it the tandem rate for all local calls that it terminates.

Verizon Wireless has not undertaken to show what percentage of the traffic that it terminates is terminated to customers who are mobile during the course of the call. Accordingly, based on the record as it now stands, we find that Verizon Wireless has not carried its burden to show that its MTSOs perform functions sufficiently similar to the functions performed by Ameritech Illinois tandem switches to satisfy the functional similarity test. Verizon Wireless is therefore authorized to charge Ameritech Illinois only the end office reciprocal compensation rate until and unless Verizon Wireless is able to make the required showing.

Issue 6: Netting

Whether the parties' Agreement should include the following section 10.3, proposed by Ameritech Illinois and opposed by Verizon Wireless: "There will be no netting by the billed Party of payments due herein against any other amount owed by one Party to the other."

Verizon Wireless' Position

Verizon Wireless does not propose contract language that would affirmatively permit netting, but maintains the Agreement should not prohibit netting, as Ameritech Illinois proposes. If Ameritech Illinois disputes Verizon Wireless' bills and withholds the billed amounts, as the Agreement permits, Verizon Wireless must have a means to focus the parties' attention quickly on the dispute, lest Ameritech Illinois withhold the disputed amounts indefinitely. The appropriate means is netting, which is allowed by common law, where it is recognized as the right of set off. By setting off an amount that it owes Ameritech Illinois against an equal amount that Ameritech Illinois has been billed but is withholding, Verizon Wireless will be able to promote prompt resolution of the dispute. It is especially important that Verizon Wireless be able to exercise its right of set off in this way, because Verizon Wireless will generally owe more money to Ameritech Illinois under the Agreement than Ameritech Illinois will owe to Verizon Wireless. Because of this difference, Ameritech Illinois could, if netting is prohibited, gain an unfair advantage in the dispute resolution process by drawing out disputes indefinitely.

Ameritech Illinois' Position

Ameritech Illinois argues that the Agreement should prohibit netting for two reasons: (1) netting would subvert the dispute resolution processes on which the parties have agreed; and (2) netting of the sort that Verizon Wireless states it wishes to preserve is not allowed by Illinois law. In support of the former reason, Ameritech Illinois points to detailed dispute resolution

provisions in sections 10 and 21 of the Agreement, under which the parties must attempt to resolve between themselves for a period of 140 days any disputes concerning bills, and may then have recourse to such other remedies as the law permits. Ameritech Illinois stresses that these dispute resolution procedures were arrived at via negotiation, and contends that Verizon Wireless, having agreed to the procedures, should not be heard to argue that it needs a means to accelerate the process. Ameritech Illinois also contends that since it is a given that the Agreement will not affirmatively allow netting, netting – i.e., one party's withholding of amounts indisputably owed to the other in response to the other's withholding of disputed amounts – could aggravate disputes and could even constitute a material breach that could result in termination of the Agreement. Finally, Ameritech Illinois states that while Illinois law does allow for the setting off of mature, mutual debts, it does not allow the setting off of a mature debt against an uncertain, disputed obligation.

Analysis and Conclusion

To begin, it must be understood that the netting scenario can arise under this Agreement in only one situation, and that is where the party that would do the netting owes an undisputed amount to the other party and seeks to net that amount against an amount that it has billed the other party but that the billed party disputes. If each party is disputing a bill rendered by the other, no netting question will arise, because both parties are permitted, under agreed language in the Agreement, to withhold the amounts they dispute. And to the extent that each party owes the other undisputed amounts, no netting question will arise, because the parties may agree without controversy that the party that owes more will simply pay the difference or, if they do not agree, then each party will pay the other what it owes.

Thus, the situation that gives rise to Issue 6 is one where (1) Verizon Wireless indisputably owes an amount to Ameritech Illinois; and (2) Verizon Wireless claims that Ameritech Illinois owes it a given amount, but Ameritech Illinois disputes the claim. In this situation, Verizon Wireless proposes that it be permitted to “net” by setting off its undisputed debt to Ameritech Illinois against Ameritech Illinois’ asserted debt to Verizon Wireless. Such self-help appears unreasonable to us, and based on the legal authorities to which the parties have cited to us, does not appear to be countenanced by Illinois law. To be sure, the common law right of set off allows a bank to apply its depositor’s account for a debt the depositor owes a bank, but an indispensable feature of the set off in such a situation is that both the bank’s debt to the customer and the customer’s debt to the bank are on an equal footing; there are, as the case law puts it, mutual demands and debts between the parties, and mature debts running both ways. *E.g., Selby v. Duquion State Bank*, 584 N.E.2d 1055, 1057 (Ill. App. Ct. 1991) (emphasis added).

Thus, it appears that the netting that Verizon Wireless seeks to preserve by its opposition to Ameritech Illinois’ proposed section 10.3 is not, in fact, permitted by Illinois law.

If that were the only defect in Verizon Wireless’ position, we might consider leaving the Agreement silent on this point, so that the parties’ relations would be governed by the common law. We are persuaded, however, that Ameritech Illinois’ proposed section 10.3 should be included in the agreement, because if Verizon Wireless were to attempt to net (as it appears to believe the law entitles it to do), the result would more likely be to aggravate the initial dispute than to promote a prompt resolution.

Having examined the pertinent language in the Agreement, we find that the parties have in fact agreed upon a fairly elaborate process by which each can dispute bills it receives from the

other. Under section 10.1.6, the billed party can, within a stated period after it receives the bill, dispute the charges in writing and withhold the disputed amount from the billing party. The parties' "billing contacts" then have 60 days to resolve the dispute. If they are unable to do so, then either party can escalate the matter to "appropriate business representatives," who are allotted 30 days to resolve the dispute. If that fails, then either party may commence dispute resolution "in accordance with the Dispute Resolution provisions set forth in this Agreement." (Agreement, section 10.1.6.)

The Dispute Resolution provisions referenced in section 10.1.6 are in section 21. Under those provisions, each party, within 10 days of initiation of the procedure, appoints a representative to try to resolve the dispute informally. (Section 21.4.) If those representatives are unable to resolve the dispute within 40 days, either party "may seek other relief under Applicable Laws." (Section 21.5.)

Under these agreed procedures, the maximum period that a party can be kept from seeking "other relief under Applicable Laws" starting on the day the bill is disputed – e.g. a complaint to the Commission or a lawsuit for breach of contract – is 140 days (60 + 30 + 10 + 40). This seems a not unreasonable period for party-to-party dispute resolution efforts and, perhaps more to the point, it is a period on which both parties agreed. We attach little weight to Verizon Wireless' argument that it should be permitted to net in order to ensure that disputes are promptly resolved when the timeframe for resolving disputes is one to which Verizon Wireless agreed.

Moreover, if the Agreement were left silent with respect to netting and Verizon Wireless were to resort to netting, there is a significant risk that what began as a rather routine disagreement – with Ameritech Illinois disputing some aspect of a Verizon Wireless bill and

withholding the billed amount as the Agreement allows – could escalate into a far more serious dispute, with Verizon Wireless withholding amounts billed by Ameritech Illinois that Verizon Wireless does not dispute it owes. Ameritech Illinois suggests that such conduct by Verizon Wireless could constitute a material breach of the Agreement, and could therefore be grounds for termination of the Agreement by Ameritech Illinois. We express no view on whether that is correct. Plainly, though, it is in no one’s interest to leave open the possibility of such a scenario.

For the foregoing reasons, the parties will include Ameritech Illinois’ proposed section 10.3 in the Agreement.

Issue 7: Mileage for Calculating Tandem Termination Rate Charged By Ameritech Illinois

Whether Ameritech Illinois should be required to institute a method for billing Verizon Wireless and other CMRS providers reciprocal compensation based on actual transport mileage rather than a median 23-mile figure.

Verizon Wireless' Position

The components of Ameritech Illinois' rates for Common Transport should be applied consistently to all types of interconnecting carriers and should reflect actual costs and the way in which those costs are incurred as closely as possible. Accordingly, Ameritech Illinois should be required to use the actual mileage of common transport facilities used for the termination of traffic in order to calculate the rate it will charge for such transport.

Ameritech Illinois charges CLECs the Common Transport rate element based on the actual mileage of facilities from the Ameritech tandem to the terminating Ameritech end office on a per mile, per minute-of-use basis. On the other hand, Ameritech Illinois charges CMRS providers a tandem rate that includes a flat per-minute rate that equals 23 miles worth of mileage for each call regardless of the actual mileage of the call. This methodology causes significant over-billing to Verizon Wireless. When the Michigan Public Service Commission ordered Ameritech Michigan to bill actual, instead of imputed mileage, Verizon Wireless experienced a 44% reduction in mileage charges.

Section 51.503 of the FCC's rules prohibits Ameritech from discriminating against CMRS carriers vis-à-vis CLECS. The 1996 Act also requires Ameritech to provide interconnection at rates, terms and conditions that are non-discriminatory. 47 U.S.C. § 251(c). In its adoption of rules to implement this provision, the FCC stated that differing charges based

not upon demonstrated differing costs, but instead on the type of carrier being charged are discriminatory.

The statute and the FCC's rules require Ameritech Illinois to use consistent components for rates for Common Transport for CLECs and CMRS providers. Ameritech Illinois already makes actual mileage measurements for CLECs and also bills IXCs based on actual mileage for switched access calls. Thus, Ameritech Illinois is clearly able to measure transport mileage. Ameritech Illinois relies on its 1996 usage analysis of wireless traffic that purportedly yielded the 23-mile figure Ameritech uses for CMRs providers, offered no real explanation of the usage analysis or how it was performed.

Ameritech Illinois' Position

Ameritech Illinois' current billing system for wireless carriers does not allow Ameritech Illinois to determine the actual mileage it transports traffic that it terminates for wireless carriers. Ameritech Illinois therefore uses a standard figure of 23 miles, calculated in 1996 as a median for all wireless traffic, as a reasonable approximation of the actual mileage. The Commission should permit Ameritech Illinois to continue to use this figure, rather than requiring Ameritech Illinois to incur the costs it would have to incur to institute a method for measuring actual miles. This result is all the more reasonable when one takes into account that Verizon Wireless' proposal would have at most a very small impact on the reciprocal compensation rates Verizon Wireless pays.

Staff's Position

Staff notes first that although Ameritech Illinois initially characterized the fixed 23-mile figure as an average, Ameritech Illinois made clear through its testimony at hearing that the figure is actually a median. This, Staff suggests, calls into question the accuracy of the figure

Ameritech Illinois is using, because the median may differ significantly from the average, and there is no apparent justification for Ameritech Illinois having used a median, rather than an average, to arrive at the proxy figure.

More generally, Staff disagrees with Ameritech Illinois' contention that the proxy figure of 23 miles is appropriate under the circumstances and preferable to any available alternative. Staff questions the 23-mile figure on multiple grounds, including Ameritech Illinois' witness' relative lack of familiarity with the particulars of the usage analysis from which the figure was derived; the fact that the usage analysis did not relate to the traffic of Verizon Wireless in particular, but rather was based on an aggregate of all wireless carriers' traffic; and the sharp increase in wireless traffic since the usage analysis was performed in 1996, and the resultant likelihood that the median as of 1996 would no longer be the media.

Plainly, it would be feasible for Ameritech Illinois to implement a system of deaveraging transport distances for CMRS providers, because Ameritech Illinois uses actual mileage measurements for CLECs and IXCs, and Ameritech Michigan uses actual mileage for wireless carriers. Staff states it is axiomatic that there would be an economic benefit to the use of actual mileage, and that the costs of implementing a method of measuring actual mileage for purposes of calculating reciprocal compensation for CMRS providers would not be, by Ameritech Illinois' admission, prohibitive or so costly as to be impractical.

Based on the above, Staff recommends that the 23-mile figure be used at the commencement of the new interconnection agreement and that Ameritech Illinois complete and provide to Verizon Wireless by no later than six months after the Effective Date of the Agreement a new, fully documented, tandem transport mileage study, based on actual traffic flows occurring after the effective date of the agreement between itself and Verizon Wireless.

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

Staff suggests that in the event that Ameritech Illinois does not institute billing based on actual mileage and also does not perform the aforementioned usage studies, that the proxy figure presented by Ameritech Illinois be reduced by 44%. This 44% represents the reduction in tandem transport mileage Verizon Wireless asserts it received when Michigan Bell began billing Verizon Wireless based on actual mileage.

Analysis and Conclusion

Issue 7 concerns the calculation of one component of the reciprocal compensation rate that Ameritech Illinois charges when it terminates via its tandem switch local calls that originate on Verizon Wireless' network. That rate consists of four elements, which correspond with the functions Ameritech Illinois' network performs to terminate such a call. For example, one element (not in dispute here) compensates Ameritech Illinois for the tandem switching it performs on the call, and another element (again not in dispute here) compensates Ameritech Illinois for the end office switching it performs to terminate the call to the called party. (*Id.*)

One of the other elements of the composite tandem reciprocal compensation rate is called “Tandem Transport Facility” (referred to by Verizon Wireless as Common Transport). It is this piece of the reciprocal compensation whole that is the subject of Issue 7. The Tandem Transport Facility component is for transport from the Ameritech Illinois tandem switch to which Verizon Wireless delivers the call to the Ameritech Illinois end office switch from which Ameritech Illinois terminates the call to its end user customer. The cost of Tandem Transport Facility is mileage sensitive – the greater the transport distance (the distance from tandem switch to end office switch), the greater the cost to Ameritech Illinois. Accordingly, the Tandem Transport Facility component of the tandem reciprocal compensation rate is mileage-based.

Tandem Transport Facility is a small piece of the tandem reciprocal compensation rate taken as a whole. Specifically, the figures that appear on page 1 of the pricing appendix to the parties’ Agreement shows that Tandem Transport Facility comprises 5.6% of the total rate.

When Ameritech Illinois charges landline carriers reciprocal compensation at the tandem rate, it uses actual, measured transport miles to calculate the Tandem Transport Facility component of the rate. When Ameritech Illinois charges the tandem rate to wireless carriers, including Verizon Wireless, Ameritech Illinois does not measure the actual mileage that it transports the call. Instead, Ameritech Illinois uses a fixed number – 23 miles – as the transport mileage for each call that the wireless carrier hands off at Ameritech Illinois’ tandem for termination.

Ameritech Illinois explained through its witness, Ms. Zaccardelli, that Ameritech Illinois uses the fixed 23-mile figure for wireless carriers for reasons that stem from Ameritech Illinois’ pre-1996 Act dealings with those carriers. Wireless carriers have been interconnecting with Ameritech Illinois’ network since the early 1980s. At that time, a method for billing wireless

usage was devised to bill usage traffic in mileage bands (e.g., Band 0; Band 0-8 miles; Band 8-15 miles, etc.) in order to fairly bill a rate that recovered the actual distance of the call.

When the 1996 Act became law, it required Ameritech Illinois to use TELRIC rates for billing local traffic terminated on its network, and to comply with that requirement, Ameritech Illinois developed TELRIC rates for billing minutes of use. In order for Ameritech Illinois to comply with the Act and meet the needs of customers negotiating service under the Act, while continuing to meet the billing needs of its existing base of wireless customers, a solution had to be devised quickly. Rather than attempt to create "substitute rates" or resort to manual billing, Ameritech Illinois developed an approach to enable it both to cope with its bill system issues and to fulfill its obligations under the Act, while still providing timely, mechanized bills to wireless carriers who obtained service under section 251/252 interconnection agreements. Because a dual billing system design that would support both the old billing structure and the new billing requirements was infeasible, Ameritech Illinois developed, and continues to use, a surrogate mileage figure for the Tandem Transport Facility element of TELRIC pricing for wireless call termination.

To arrive at this surrogate mileage figure, Ameritech conducted usage analyses of all wireless traffic to find the median mile of the mileage bands. The median mile was different in each state, and for Illinois, 23 was determined to be the appropriate mileage to use.

Ms. Zaccardelli testified that this approach was explained to wireless carriers negotiating interconnection agreements under the 1996 Act, and that those carriers, until now, accepted Ameritech Illinois' use of the 23-mile figure. Wireless carriers were aware of the challenges and limitations posed by existing billing systems. Once they had an understanding of the process, wireless carriers accepted Ameritech Illinois' approach as a fair and cost-efficient way to obtain

the new TELRIC pricing. Implementation of the new rates was accomplished in a reasonable time and the continuity of billing proceeded with minimal problems. When the initial interim rates were modified by the Commission, the final, approved TELRIC rates were put in place.

Verizon Wireless contends that Ameritech Illinois should be required to convert from its current use of a surrogate mileage figure – 23 miles for each call – to actual, measured transport mileage for each call. The ground for Verizon Wireless' contention is that the use of actual miles would more accurately reflect actual costs, and that when Ameritech Michigan switched to actual mileage in Michigan, Verizon Wireless purportedly experienced a 44% reduction in transport mileage charges there (the equivalent of a 2.5% reduction in the reciprocal compensation rate).

It is correct, of course, that the use of actual miles would be more precise than the use of a surrogate figure. That, however, does not automatically justify a requirement that Ameritech Illinois make the change that Verizon Wireless proposes. It is undisputed that Ameritech Illinois would incur costs to make such a change. The question, therefore, becomes whether the benefit of the increased precision would outweigh those costs. The record in this proceeding is insufficient for the Commission to make that determination. There is no evidence of what it would cost Ameritech Illinois to make the change that Verizon Wireless proposes, and there is no evidence of what benefit (if any) the change would give Verizon Wireless. Consequently, we cannot perform the cost/benefit analysis that an informed resolution of Issue 7 demands. All we know for certain about the cost side of the equation is that Ameritech Illinois would incur some unknown cost to implement the change (Staff, in a footnote in its initial brief allows for the possibility that the cost might be prohibitive). And all we know on the benefit side of the equation is that a change to actual mileage measurements may have the potential for reducing

Verizon Wireless' reciprocal compensation obligations by as much as 2.5% (assuming, though there is no basis in the record for such an assumption that Verizon Wireless' Michigan experience were duplicated in Illinois); and, even then, we cannot translate that 2.5 percent reduction (or any other reduction) into a dollar amount, because there is no evidence in the record as to the volume of Verizon Wireless-originated traffic that Ameritech Illinois terminates.

Under these circumstances, it is appropriate to consider whether one party or the other can fairly be considered responsible for any inadequacies in the record. There is no clear answer to that question. On the one hand, one might expect Ameritech Illinois, as the advocate of the cost side of the cost/benefit analysis, to have come forward with some projection of the costs it would expect to incur; on the other hand, it appears that Verizon Wireless did not inquire into those costs. On the flip side, Verizon Wireless offered no evidence about the volume of its traffic terminated by Ameritech Illinois, or the dollar amount of its reciprocal compensation obligations to Ameritech Illinois; nor, though, does it appear that Ameritech Illinois inquired.

Under these circumstances, the Commission will allow Ameritech Illinois to continue to use the 23-mile figure that it has been using since 1996 for all wireless carriers in Illinois. The use of that figure has been accepted by all wireless carriers other than Verizon Wireless. The figure may be imperfect, but it appears to be a not unreasonable approximation of actual mileage.

Finally, while Staff's proposed resolution of the issue has some appeal, it appears to suffer from an important flaw. The record is clear that Ameritech Illinois' current billing system for wireless traffic does not capture the data that would be required to perform the traffic study that is at the core of Staff's proposal. In order to perform such a study, Ameritech Illinois would need to put in place a method to capture the data, and that method, it appears to us, could be used to measure actual miles for billing purposes just as readily as to gather data for the proposed

study. Thus, our determination that the record does not warrant a requirement that Ameritech Illinois immediately implement a method for measuring actual miles is tantamount to a determination that the record does not warrant a requirement that Ameritech Illinois perform a new traffic study.