AMERITECH ILLINOIS' RESPONSES TO QUESTIONS SUBMITTED BY COMMISSIONER SQUIRES

REHEARING ISSUE #2: UNBUNDLING REQUIREMENTS

1. *Impair Standard:*

A) *Please comment on the availability of alternatives to unbundling Project Pronto NGDLC ("NGDLC") outside the incumbent LEC's network, including, but not necessarily limited to, self-provisioning by a requesting carrier or third-party providers. Please discuss the practical, economic, and operational issues surrounding each alternative; including a discussion of the factors found in Section 51.317(b)(2)(i) through (v).*

As a preliminary matter, it is critical to note that this question relates to the FCC's "impair" test under Rule 317. The FCC has already applied that test to the kind of facilities that make up the Pronto DSL architecture – packet switching facilities. *UNE Remand Order*, ¶¶ 303-17. The FCC concluded, based on an exhaustive record and analysis, that packet switching facilities are not generally subject to unbundling and can only be unbundled in the limited circumstances set forth in FCC Rule 319(c)(5). Once the FCC has applied the 1996 Act and Rule 317 to particular facilities, no state commission is free to independently re-apply that test for itself. Any state deviation from the FCC's conclusion would automatically be preempted under the Supremacy Clause. *E.g.*, *Geier v. American Honda Motor Corp.*, 120 S. Ct. 1913, 1921 (2000); *Bethlehem Steel Co. v. New York State Labor Relations Bd.*, 330 U.S. 767, 775-76 (1947) (where federal and state authorities regulate the same area, "action by one necessarily denies the discretion of the other"). As the Supreme Court found in *IUB II*, any interpretation of the 1996 Act that allowed every state commission to revisit the FCC's application of the Act would be unprecedented and "surpassing strange." *IUB*, 525 U.S. at 378 n.6. Such state-level collateral attacks on the FCC's rules and decisions also are barred by the Hobbs Act. 28 U.S.C. 2342(l); *FCC v. ITT World Comms.*, 466 U.S. 463, 468 (1984). Thus, the impair test cannot be re-applied to the packet switching facilities at issue here, which are governed exclusively by FCC Rule 319(c). Nevertheless, Ameritech Illinois responds to Commissioner Squires's question below.

1. Alternatives to "unbundling" Project Pronto DSL facilities that are outside the incumbent LEC's network include both self-provisioning by the CLEC and obtaining services and equipment from third-party providers. The FCC has already found that these are viable alternatives to the unbundling of packet switching functionality, which is what the Project Pronto DSL facilities provide. Specifically, the FCC found that CLECs are "actively deploying facilities to offer advanced services such as xDSL across the country," that "[c]ompetitive LECs and cable companies appear to be leading incumbent LECs in their deployment of advanced services,"[1] and that "requesting carriers have been able to secure the necessary inputs to provide

[1] This reference to "cable companies" is especially significant because it is consistent with Ameritech Illinois' evidence that there is no separate market for xDSL services, but rather only a comprehensive market for all broadband services, and that the existence of cable modem competition (as well as wireless and satellite) must therefore factor into the Commission's legal and policy analysis in this case.

advanced services to end users in accordance with their business plans." *UNE Remand Order*, ¶ 307. Based on these factors and relevant policy considerations regarding the promotion of advanced services deployment and competition, the FCC adopted an approach of "regulatory restraint" and severely restricted the circumstances in which packet switching can be required to be unbundled. *UNE Remand Order*, ¶¶ 314-17. Thus, both self-provisioning and use of third party vendors are recognized as viable alternatives to "unbundling" Project Pronto DSL packet switching facilities under the Rule 317 impairment test.

2. Another alternative would be the use of different broadband technologies, such as cable modem, fixed wireless, and satellite. Many CLECs already use such technologies in addition to xDSL technology as a means of providing broadband service. These technologies are readily available today: "With regard to choice among broadband access providers, there is evidence that ILECs, CLECs, and other competitive providers are aggressively rolling out alternative broadband technologies."[2] For example, AT&T provides cable modem broadband service, which is by far the dominant broadband service in the market today. Am. Ill. Rhg. Ex. 1.0 (Ireland) at 12-13. Sprint provides both DSL service and wireless broadband service. Sprint Rhg. Ex. 3.0 (Burt) at 31. MCI WorldCom has invested in wireless spectrum to provide advanced services, and Rhythms and Covad are open to deploying non-DSL technologies. Am. Ill. Pet. for Interlocutory Review at 8 n.11 (citing SEC filings). These marketplace facts demonstrate the availability of alternative broadband technologies and show that mere investment in xDSL facilities does not foreclose a CLEC from also competing through such technologies.

3. Although it is not "outside the incumbent LEC's network," the proposed Broadband Service also offers a viable alternative to "unbundling" Project Pronto. It is important to remember that the impair test under FCC Rule 317(b)(1) requires a "totality of the circumstances" analysis. Thus, although the Supreme Court said that an impair analysis should include consideration of alternatives "outside" the ILEC's network, *IUB II*, 525 U.S. at 391, it never even hinted the analysis was limited to such alternatives. Indeed, a refusal to consider alternatives "inside" the ILEC's network (such as the Broadband Service) would be just as impermissibly narrow as the FCC's original refusal to consider alternatives outside the ILEC's network. Thus, the Broadband Service can and should be considered in any impairment analysis here (although, as explained above and in Ameritech Illinois' Brief on Rehearing (§ II), no such analysis is permissible in light of the FCC's ruling on the application of the impair test and Rule 317 to packet switching). The Broadband Service gives CLECs a less expensive, more rapidly available, more ubiquitous competitive alternative to "unbundling" Project Pronto DSL facilities, and does so without raising the significant network-reliability concerns of such "unbundling" and line card "collocation." CLECs also can collocate DSLAMs in Ameritech Illinois central offices and remote terminals and access copper subloops, dark fiber, and lit fiber to provide broadband service.

With respect to each of these alternatives, the factors in FCC Rule 317(b)(2)(i)-(v) are addressed in Ameritech Illinois' Brief on Rehearing (§ II. A).

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[2] Memorandum Opinion and Order, CS Docket 99-251, FCC 00-202, ¶¶ 117-18 (2000) ("MCI and Sprint, for example, are acquiring struggling [fixed wireless] licensees and re-deploying their spectrum to provide broadband services.")

B) *In contrast to the above factors in Section 51.317(b)(2) which the ICC "shall consider" when performing an unbundling analysis, the rules state that we "may" consider Section 51.317(b)(3) components. Please comment on this distinction and why both sets of factors are not required in an unbundling analysis.*

The FCC viewed the factors set forth in Rule 317(b)(2) as those that it must consider "at a minimum" in applying the impair test under Section 251(d)(2). *UNE Remand Order*, Overview at 10. However, recognizing that any imposition of an unbundling requirement must rest on a "limiting standard" that is "rationally related to the goals of the Act," *id.*; *IUB II*, 525 U.S. at 388, the FCC established the factors in Rule 317(b)(3) to ensure that any proposed unbundling requirements were evaluated "within the larger statutory framework of the 1996 Act" and would "further the goals of the Act in accordance with the Supreme Court's directive." *UNE Remand Order*, Overview at 10 and ¶ 103. As the FCC noted, "Congress apparently contemplated that [the FCC] would consider additional factors" beyond the minimum required by the necessary or impair standards. *Id*. Any agency applying Rule 317 must therefore consider the relationship among all the factors for the particular network element in question and "determine whether the sum total of the effect of the factors require a finding that the element must be unbundled." *Id.* In this case, of course, the FCC has already applied both the (b)(2) and (b)(3) factors to packet switching facilities, such as those that make up the Pronto DSL architecture, and concluded that packet switching can be unbundled only in very limited circumstances (which do not exist in Illinois).

Consideration of the Rule 317(b)(3) factors is not mandatory, but as a practical matter is always required for reasoned decisionmaking. For example, the FCC acknowledged that "there may be circumstances in which there is significant evidence that competitors are impaired without unbundled access to a particular element [under the factors in Rule 317(b)(2)], but that unbundling the element would not further the goals of the Act [under the factors in Rule 317(b)(3)]." *UNE Remand Order*, ¶ 106. In such circumstances an agency must decline to order unbundling. Indeed, that is what happened in the FCC's analysis of packet switching functionality in the *UNE Remand Order*, ¶¶ 303-17, where the FCC concluded that large business customers were not impaired without unbundled access to packet switching and that while small business and residential customers might be impaired in some cases (*id*., ¶ 309), other considerations under the goals of the Act required restricting the unbundling duty to "limited circumstances." *See id.*, ¶¶ 314-17.

C) *Please comment on each of the factors listed in Section 51.317(b)(3).*

As described above, the factors in Rule 317(b)(3) are intended to ensure that any imposition of any unbundling requirement "further[s] the goals of the Act in accordance with the Supreme Court's directive." *UNE Remand Order*, ¶ 103. The factors are generally designed to promote the two "fundamental goals" of the 1996 Act, which are to "open the local exchange and exchange access markets to competition and to promote innovation and investment by all participants in the telecommunications marketplace." *Id*., citing the Joint Explanatory Statement to the 1996 Act, at 1. Section 706 of the Act further specifies the goal of "encourag[ing] the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans." 47 U.S.C. 157 note. The FCC explains how each of the (b)(3) factors is related to these goals in paragraphs 103-05 and 107-16 of the *UNE Remand Order*.

Ameritech Illinois' Brief on Rehearing (§ II.B) applies the (b)(3) factors to the Project Pronto "UNEs" included in the March 14 Order in this case. As that analysis shows, requiring "unbundling" of the Project Pronto DSL network into various pieces would impede the pro-competitive and pro-consumer goals of 1996 Act, including the Section 706 goal of making advanced services available on a timely basis to "all Americans" – such as the mass market of small business and consumer customers that Project Pronto is primarily intended to serve.

This is especially so because of the nature of the broadband services market, which includes multiple providers using different technologies (cable modem, wireless, satellite, DSL) to compete head-to-head. DSL providers are a distant second to cable modem service providers in market share. Further, no other provider of advanced services is subject to regulation of those services like Ameritech Illinois. Imposing asymmetric regulatory burdens on Ameritech Illinois would only serve to prevent Project Pronto DSL investment and deter future investment by ILECs and CLECs alike. This would lead to *less* competition and restrict consumer choice in the mass market by largely ceding the field to cable companies like AT&T. The broadband market is new and emerging, and placing regulatory burdens on one non-dominant provider of one type of delivery technology, while all competing technologies remain unregulated, directly conflicts with the goals of the Act and sound public policy.

2. ***UNEs.*** *Please comment on the appropriateness of the NGDLC UNEs that were previously defined in Docket No. 00-0393. If the UNE(s) should be redefined, please comment on the UNEs that should be required, including a discussion on whether the end-to-end Broadband Offering could qualify as a UNE.*

The "NGDLC UNEs" previously defined in this docket are inappropriate for several economic, technical, and legal reasons.

The primary legal problem is that the alleged "UNEs" provide packet switching functionality and thus cannot be unbundled unless all four conditions of the FCC's Rule 319(c)(5) are met, which is not the case here. *See* Am. Ill. Br. on Rhg., § I. In addition, although the FCC's packet switching rule is determinative, the alleged "UNEs" could not be required to be unbundled anyway because CLECs are not "impaired" without access to them. *See* Am. Ill. Br. on Rhg., § II.

The economic problems are, first, that the extensive costs of attempting to provide the ordered elements on an unbundled basis would prevent any economic incentive to deploy the Pronto DSL facilities. That would deny the many public-interest benefits that the FCC recognized deployment would bring. *Project Pronto Order*, ¶¶ 1-2, 23. Increased costs also would cause problems even if the Pronto DSL facilities were deployed. Those costs would have to be recovered from CLECs in the "UNE" rates. Such recovery, however, would inevitably make use of Pronto "UNEs" too expensive as a means of competing with cable modem and other technologies. Am. Ill. Rhg. Ex. 8.0 (Aron) at 40; Am. Ill. Rhg. Ex. 8.1 (Aron) at 16. That would defeat the whole purpose of unbundling and also leave Ameritech Illinois with no way to recover its sunk costs.

The primary technical problem is that the alleged "UNEs" all function as an integrated whole to provide the packet switching functionality and thus cannot be provided on an

"unbundled" basis from one another. In addition, the subloop "UNEs" to a Project Pronto RT have no accessible point as required by the FCC's rules. Third, CLEC-controlled line cards, whether "collocated" or "unbundled," would create severe stranded-capacity and operational problems. Finally, the alleged "UNEs" of a Permanent Virtual Path and a Permanent Virtual Circuit would, if unbundled and leased to CLECs, open the door to substantial capacity problems in the Pronto architecture, restricting bandwidth for service to mass market customers and deteriorating service quality for those customers, possibly preventing them from receiving broadband service at all. Am. Ill. Br. on Rhg., § IV.

As for the question "whether the Broadband Offering could qualify as a UNE," the answer is no. *First*, it would significantly stretch the 1996 Act's definition of a "network element" to define a complete, end-to-end service as a single element. *See* 47 U.S.C. 153(29). The term itself refers to an "element" of the network, not the network as a whole. *Second*, even if the Broadband Service could legally be defined as a single "network element," or as a combination of multiple network elements, it could only be required to be "unbundled" if the four conditions of the FCC's packet switching rule existed, which they do not in Illinois. The Broadband Service also cannot satisfy the Rule 317 impair test, and the CLECs have not even attempted to prove it would.

3. ***Unbundling Packet Switching:*** *Please provide a detailed analysis on the criteria for unbundling packet switching.*[3] *Please include in your analysis responses to the following inquiries:*

The four conditions that *all* must be satisfied before an ILEC can be required to provide unbundled packet switching are analyzed in detail in Ameritech Illinois' Brief on Rehearing (§ I). The responses to the specific subparts of this question are set forth below.

i) *Does Section 51.319(c)(5)(i) require that the LEC be replacing copper facilities with fiber or simply require the LEC to deploy digital loop systems (which utilize fiber feeder instead of copper)?*

Section 51.319(c)(5)(i) requires that the ILEC actually be replacing copper facilities with fiber, not merely deploying DLCs. The FCC made clear that its concern in this regard was that

> [i]n locations where the incumbent has deployed digital loop carrier (DLC) systems, an uninterrupted copper loop is replaced with a fiber segment or shared copper in the distribution section of the loop. In this situation, and where no spare copper facilities are available, competitors are effectively precluded altogether from offering xDSL service if they do not have access to unbundled packet switching.

UNE Remand Order, ¶ 313. Thus, the FCC's concern, as reflected in Rule 319(c)(5)(i) and (ii) was with situations where an ILEC had both actually replaced copper distribution facilities with fiber and no spare copper loops were available, foreclosing the CLEC from offering xDSL in that area. If, however, the ILEC merely deploys DLC facilities *without* replacing existing copper distribution facilities, no such problem exists, as the new DLC (under Project Pronto, the

[3] See 47 C.F.R. Section 51.319(c)(5).

NGDLC) is an *addition* to the network, not a *replacement* of existing copper. Thus, Rule 319(c)(5)(i) applies only in cases where a DLC or other system is actually used to "replace copper facilities in the distribution section" of the loop.

ii) *In large part, Ameritech-Illinois is deploying NGDLC to extend DSL services to those customers who are served by facilities that can not currently support it. That said, is it a true statement that wherever NGDLC is deployed, no copper in that area can support DSL services? If not, please comment on the ability of a CLEC to determine the availability of spare copper on an individual case basis via the pre-ordering function.*[4]

The answer is no. Because Project Pronto is an overlay network, even where Pronto NGDLCs are deployed at the RT, existing copper facilities will remain available to CLECs for xDSL service. This includes both copper subloops and full copper loops shorter than 18,000 feet. In many locations where Project Pronto DSL facilities would be deployed, copper loops shorter than 18,000 feet would remain. Am. Ill. Ex. 4.0 (Boyer) at 57; Am. Ill. Ex. 6.0 (Welch) at 11-12. A CLEC can gain access to these copper facilities, loops or subloops, in a variety of ways, including accessing the copper facility at the feeder-distribution interface ("FDI") between the RT and the customer's premises, or requesting that Ameritech Illinois construct an Engineering Controlled Splice ("ECS") at or near the remote terminal, as required by the *Project Pronto Order*.

Loop make-up information on the availability of spare copper is fully available to CLECs through the dispatch function (which is part of Verigate), and that functionality will become part of LoopQual in Release 11 later this year. Rhg. Tr. 2581-2583. As for the ability of CLECs to obtain information about Pronto loops, where Project Pronto is deployed, a back office system called PRONTO Construction Administration Tool ("PCAT") already provides the LoopQual gateway with the availability dates and "turn-up" information about Pronto facilities at each remote terminal location. The scheduling information contained in PCAT also is available to CLECs through a Graphical User Interface ("GUI") called DSL-Tracking Inquiry ("DTI"). In addition to providing Pronto scheduling information through LoopQual and DTI, Ameritech also provides facility completion information to CLECs six months in advance, pursuant to FCC network disclosure rules. Am. Ill. Rhg. Ex. 13.1 (Waken) at 13; Rhg. Tr. 2569 (Waken).

iii) *Has Ameritech-Illinois denied a CLEC request to deploy a DSLAM at any Ameritech-Illinois remote terminal, pedestal, or CEV; or denied a CLEC request to permit a virtual collocation arrangement at these subloop interconnection points [as described in Section 51.319 (c)(5)(iii)]? Could this criteria be satisfied if it is deemed to be technically or economically infeasible for a CLEC to engage in arrangements described in Section 51.319 (c)(5)(iii)? If so, please provide testimony on the technical and economic feasibility of said alternatives.*

Ameritech Illinois has not declined any CLEC request for physical or virtual DSLAM collocation in any of its remote terminals or other listed location. Am. Ill. Rhg. Ex. 6.0 (Welch)

[4] See Section 3.0.1 "Loop Qualification" of SBC/Ameritech Accessible Letter No. CLECAM00-044.

at 11-12. In fact, no CLEC has even requested such DSLAM collocation in Illinois. Am. Ill. Rhg. Ex. 6.1 (Welch) at 2.

This condition of the FCC's packet switching rule could not be satisfied by alleged economic infeasibility. The rule itself and the FCC's discussion of packet switching in the *UNE Remand Order* say nothing about economic infeasibility being a factor in the analysis, and the FCC already considered the economics of DSLAM collocation at RTs in crafting its rule. *UNE Remand Order*, ¶ 309. Moreover, the Supreme Court has made clear that mere considerations of increased costs cannot support an unbundling or collocation requirement. *IUB II*, 525 U.S. at 392; *see also GTE Service, Inc. v. FCC*, 216 F.3d 416, 424 (D.C. Cir. 2000) (reaching same conclusion with regard to "necessary" test for collocation). The FCC's rule focuses on whether the ILEC has not permitted the CLEC to collocate its DSLAM, not whether the CLEC believes that collocation would be economically infeasible.

True technical infeasibility (as opposed to lack of space) conceivably could be sufficient to meet this condition if that were the only reason the ILEC denied a collocation request. Such issues naturally would have to be evaluated on an RT-by-RT basis, but it is difficult to imagine how DSLAM collocation would ever be completely technically infeasible. *See* Am. Ill. Rhg. Ex. 6.0 (Welch) at 12-13. As noted in Ameritech Illinois' Brief on Rehearing, space concerns (which differ from technical infeasibility concerns) are unlikely to ever be a problem because the SBC ILECs, unlike any other ILECs in the country, are required by the *Project Pronto Order* to (1) take affirmative steps to make collocation space available in existing RTs, and (2) to overbuild new RTs to include extra space for DSLAM collocation. *Project Pronto Order*, ¶¶ 34-35 and App. A at 38-39. The FCC found that these "collocation commitments help ensure that competitive carriers will have access to the remote terminals" and "enable[] unaffiliated carriers to deploy equipment used to provide different types of DSL service." *Id.*, ¶ 35.

iv) *Please comment on whether the phrase "for its own use", found in Section 51.319(c)(5)(iv), should be interpreted to mean the ILEC and any affiliates/subsidiaries, or just the ILEC company? Is this interpretation affected by the D.C. Court decision in the ASCENT case which rejected the advanced services affiliate requirement of the FCC Merger Order?*

The first question is addressed in Ameritech Illinois' Brief on Rehearing (§ I). The answer is that the phrase "for its own use" applies only to the ILEC. This interpretation is not affected by the *ASCENT* case. At the time of the *UNE Remand Order*, the FCC was both (i) aware it had ordered SBC a month earlier to offer advanced services through a separate affiliate, and (ii) of the view that such affiliate was not an ILEC. In drafting the packet switching rule as it did, then, the FCC naturally did not mean to include such an affiliate, or it would have said so.

4. ***Safeguards*****:** *If it is found that NGDLC does not meet the unbundling requirements, what assurances, if any, could be put in place to ensure that Ameritech-Illinois does not arbitrarily withdraw the Broadband Offering from CLECs and that parties cooperate to implement the latest NGDLC-related technological advances? Please comment on the following options as alternatives to unbundling: subjecting the Wholesale Broadband Offering and any future technological developments to arbitrations under Section 252(b), importing to Illinois the commitments of SBC/Ameritech from the Project Pronto Waiver*

Order, requiring state-specific collaboratives to facilitate the introduction of new advances in NGDLC technology.

If the Commission decides against unbundling Ameritech Illinois' Project Pronto DSL facilities, Ameritech Illinois will commit to providing the wholesale Broadband Service through an appendix to a CLEC's interconnection agreement for what amounts to the next three years at a fixed, cost-based price. Am. Ill. Rhg. Ex. 1.0 (Ireland) at 32-33. As Mr. Ireland explained, Ameritech Illinois will continue to provide the Broadband Service until October 1, 2004, unless the Commission, the FCC, or a court of competent jurisdiction issues a final, non-appealable order before then ordering the unbundling of Pronto DSL facilities. Rhg. Tr. 359-61. This commitment extends the availability of the Broadband Service by about a year from the date to which Ameritech Illinois is currently obligated to provide the service under the conditions of the FCC's SBC/Ameritech merger.

This three-year commitment is substantial given the dynamic and ever-evolving nature of the advanced services market. Am. Ill. Rhg. Ex. 1.1 (Ireland) at 11. This commitment provides the CLECs with certainty as to the Broadband Service's availability and allows CLECs to commit to serving and competing for advanced services customers in Illinois. By offering the Broadband Service for such an extended period, Ameritech Illinois will be taking some of the risks of change in the marketplace away from the CLECs and incurring the risks itself. The broadband market in 2004 will likely look much different than it does today, but the Broadband Service still would be available. *Id*.

Given this commitment, it is neither appropriate nor necessary to import terms from other orders[5] or to require state-specific collaboratives. SBC/Ameritech is already conducting collaboratives pursuant to the FCC's merger conditions. Am. Ill. Rhg. Ex. 1.0 (Ireland) at 33. These collaboratives allow CLECs to adequately discuss the development and deployment of future features and functions over the Pronto DSL architecture. Am. Ill. Rhg. Ex. 4.0 (Boyer) at 10. The FCC has found that these collaboratives "adequately address[]" CLEC concerns about the "on-going development of new services and the risk that SBC's incumbent LECs will discriminate in favor of their chosen strategy" and will ensure CLECs have a forum for "hav[ing] their own needs considered and met on an equivalent basis to SBC's Advanced Services Affiliate." *Project Pronto Order*, ¶ 43. CLECs have a variety of enforcement avenues if they believe Ameritech Illinois is acting improperly in the collaboratives. *Id.*, App. A at 43. There is no need to duplicate that collaborative process on a state-specific level.

Finally, it would be inappropriate to subject the Broadband Service to arbitrations under Section 252(b). As discussed in Ameritech Illinois' Brief on Rehearing, Ameritech Illinois cannot be ordered to unbundle or otherwise provide the Broadband Service as a UNE because it contains packet switching functionality and because the CLECs are not impaired without unbundled access to it. Am. Ill. Br. on Rhg., §§ I & II. Nonetheless, Ameritech Illinois has agreed to provide the Broadband Service as a service, at TELRIC-based rates. It would also be inappropriate to subject future technological developments to arbitrations under Section 252(b).

[5] Although the commitments made by SBC's ILECs in the FCC's *Project Pronto Order* were made in the course of a federal proceeding, they nonetheless govern Ameritech Illinois' operations in Illinois. Thus, there is no need to import those commitments to Illinois.

Doing so would allow CLECs to force Ameritech Illinois to deploy new equipment and facilities that Ameritech Illinois would not deploy for itself. This runs afoul of the 1996 Act, which prohibits regulators from requiring an ILECs to build a network superior in quality to the one it provides itself (*IUB III*, 219 F.3d at 757-58), and also ignores all of the network-reliability and service-quality concerns that can arise even with capabilities a manufacturer has offered for deployment. *See* Am. Ill. Br. on Rhg., § II.C. Ameritech Illinois believes that the FCC's national collaborative is the best forum for addressing deployment of future features and functions.

5. ***D.C. Court Decision.*** *Please comment on the impact, if any, the D.C. Court Decision in the ASCENT case[6] has on the FCC Project Pronto Waiver Order and associated commitments. Will Ameritech-Illinois continue to provide advanced services via an advanced services affiliate?*

The FCC has not ruled on how, or whether, the *ASCENT* decision affects the *Project Pronto Order* and SBC is continuing to evaluate the court's opinion. At present, SBC/Ameritech continues to provide advanced services in Illinois through a separate affiliate and SBC's ILECs are subject to all the requirements of the *Project Pronto Order* where Pronto DSL facilities are deployed. The earliest that the advanced service affiliate(s) could become an office or division of the ILEC(s) is January 9, 2002. The conditions of the *Project Pronto Order* continue to apply "so long as SBC/Ameritech is required to provide Advanced Services through a separate Advanced Services affiliate in the relevant state under Paragraph 12 of the SBC-Ameritech Merger Condition." Am. Ill. Rhg. Ex. 4.0 (Boyer) at 58. SBC has not exercised its conditional right under the *ASCENT* decision to roll its data affiliates back into the ILECs and may never exercise that conditional right.

REHEARING ISSUE #3: LINE CARD COLLOCATION

6. ***Line Card Collocation.*** *Considering that line cards are utilized by the current loop infrastructure of Ameritech-Illinois and are treated as part and parcel of the UNE loop,[7] please comment on the following:*

A) *Can and/or should the Commission treat ADLU cards as part of the loop for unbundling purposes?*

Under the FCC's rules, the Commission cannot treat ADLU cards as part of the loop for unbundling purposes. The FCC defines a local loop as including "attached electronics," but specifically qualifies that by adding, "*except* those electronics used for the provision of advanced services." 47 C.F.R. 51.319(a)(1) (emphasis added). It is undisputed that ADLU cards are "attached electronics" and would be used for providing xDSL advanced services,[8] and thus by

[6] *Association of Communications Enterprises v. FCC*, 235 F.3d 662 (D.C. Cir. 2001).

[7] For example, within its UNE cost studies, Ameritech includes the cost of line cards as an input to the UNE loop, identical to how it treats feeder and distribution cable.

[8] *Project Pronto Order*, ¶ 14 ("The plug-in ADLU card is used to provide advanced services to consumers"; "the plug-in ADLU card is an indispensable component for providing ADSL service"); Am. Ill. Rhg. Ex. 3.0 (Ransom) at 6-7; Rhg. Tr. 1253-54 (Dunbar); Rhg. Tr. 1429-30, 1444-45 (Watson).

definition cannot be considered part of the local loop. Rather, the ADLU card is part of the packet switching network element. The FCC recently reconfirmed that "[a]n ILEC . . . is not required to unbundle packet switching capability that may be associated with a subloop unless the Commission's four-part test for packet switching capability unbundling . . . is met."[9]

B) *Is the above interpretation consistent with C.F.R. 47 Section 51.307(c)?*[10]

Yes. Section 51.307(c) refers to the use of an "unbundled network element." Aside from the Order now on rehearing, the ADLU line card has never been classified as a UNE. A loop is a UNE, but by definition it excludes ADLU cards. Furthermore, because an ADLU card is not part of the local loop, it is not subject to Rule 307(c) insofar as that rule applies to the CLECs' ability to use unbundled loops. Rather, an ADLU card is part of the packet switching network element, and thus potentially subject to unbundling only if the requirements of the FCC's rule on packet switching are satisfied.[11]

C) *C.F.R. 47 Section 51.319 provides for an exception to attached electronics for those electronics used for the provision of advanced services, such as Digital Subscriber Line Access Multiplexers. Does the ADLU card qualify for this exception?*

Yes. See the response to subpart A above.

7. ***Line Card Compatibility.*** *Please comment on the following regarding line card compatibility: (i) is it possible for a CLEC to enter into a partnership with Alcatel or a licensing agreement with a third-party to engineer different flavors of DSL cards than what Ameritech-Illinois chooses to deploy? (ii) are there any established industry standards governing line card interchangeability?*

The answer to subpart (i) is yes. As Dr. Ransom explained, it is possible for CLECs to deal directly with Alcatel to create different types of DSL line cards from what Ameritech Illinois has chosen to deploy. Am. Ill. Rhg. Ex. 3.0 (Ransom) at 8. It is extremely doubtful that a third party could engineer line cards that were compatible with Alcatel equipment unless that third party operates under a direct licensing or other arrangement with Alcatel. Of course, even if different flavors of DSL cards were developed, "collocation" of those cards would still be contrary to law and difficult and costly as a technical matter, as explained in Ameritech Illinois' Brief on Rehearing and the testimony of Mr. Boyer, Mr. Keown, Mr. Hamilton, and Mr. Waken. In any event, the national collaborative established by the *Project Pronto Order* provides the proper forum for discussing deployment of such different types of cards.

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[9] Letter from John A Rogovin, FCC Deputy General Counsel, to Hon. W.J. ("Billy") Tauzin, dated July 26, 2001, at 3 (Attachment B to Ameritech Illinois' Brief on Rehearing).

[10] Section 51.307(c) requires an ILEC to provide all "features, functions, and capabilities" of a UNE "in a manner that allows the requesting telecommunications carrier to provide any telecommunications service that can be offered by means of that network element."

[11] *Ibid*.

At present there are no established industry standards governing line card interchangeability and it is unlikely that such standards will or could be developed. Am. Ill. Rhg. Ex. 3.0 (Ransom) at 7.

REHEARING ISSUE #6: TECHNICALLY INEFFICIENT/INFEASIBLE

8. ***Points of Interconnection.*** *Please comment on the following:*

A) *Describe in detail every technically-feasible point of interconnection or access to sub-components within the NGDLC Ameritech-Illinois is deploying?*

Given Ameritech Illinois' planned deployment of Pronto DSL facilities, there would be no technically feasible points of interconnection or access to the sub-components of the Pronto NGDLC systems within an RT site. Am. Ill. Rhg. Ex. 4.0 (Boyer) at 61. CLECs can access an end-to-end service over the Pronto DSL network at the central office and can access subloops at the SAI or FDI or through an Engineering Controlled Splice from a DSLAM collocated at an RT. *Id.*; Am. Ill. Rhg. Ex. 6.0 (Welch) at 12-13.

B) *Is it technically feasible to cross-connect from the central office fiber distribution frame to a CLEC-collocated ATM switch, thereby allowing a CLEC to bypass the Ameritech-Illinois-owned OCD port? Are there any other technically feasible ways to bypass the ILEC packet switching function?*

It is not possible to bypass the Ameritech Illinois' OCD under Ameritech Illinois' planned method of NGDLC deployment. Mr. Boyer discusses this issue in more detail on pages 62-64 of his direct testimony on rehearing. As he explains, the OCD contains the electronics necessary to route and aggregate the incoming data packets from the OC-3c fiber facility – which contains the data packets for *all* the CLECs serving customers from that RT – to the proper CLEC's equipment in the central office. If, however, a CLEC deployed its own transport facility from the RT to the central office, or collocated its own DSLAM in the RT and leased transport to the central office, it could connect that transport facility to its equipment in the central office.

C) *If Ameritech-Illinois has hard-wired various components of the NGDLC together, please comment on how a CLEC, with collocated stand-alone equipment inside the remote terminal, would access individual copper pairs where NGDLC has been deployed?*

Mark Welch addresses this issue at pages 13-14 of his direct testimony on rehearing. In the situation described, the CLEC would need to obtain an Engineering Controlled Splice to access copper subloops running to the customer's premises. One engineering alternative, which is not part of the planned Pronto DSL deployment, would be to install separate cross-connect equipment in every RT to allow collocated CLECs to access every subloop served from that RT. As Mr. Welch explains, that would impose substantial new costs on Ameritech Illinois, as cross-connect equipment for as many as 5,000 connections could be required. Mr. Keown's rebuttal testimony on rehearing (at 8) explains the significant cost impact of such a step. A hard-wired configuration was chosen for its many advantages over other alternatives, including consistency with past practice, elimination of a potential point of failure in the network, eliminating unnecessary locations for field technicians to visit, maximizing flow-through of service orders,

and decreasing the complexities of inventorying outside plant. Am. Ill. Rhg. Ex. 6.0 (Welch) at 13. Many of these advantages help to drive down the costs of Pronto DSL deployment. *Id.*; Am. Ill. Rhg. Ex. 6.1 (Welch) at 5-6; Rhg. Tr. 1992-93 (Keown); Am. Ill. Ex. 3.1 (Ransom) at 6. Keeping costs down is essential for services provided over the Pronto DSL network to be competitive, especially against cable modem service in the mass market for high-speed Internet access.

9. ***Increased Costs.*** *Ameritech has claimed that unbundling NGDLC would substantially increase its costs to the point where deployment of DSL facilities becomes economically infeasible.*

A) *Please provide all cost studies and supporting documentation and assumptions that SBC/Ameritech has used to support its assertions of increased costs.*

The cost analysis used to support assertions of increased costs from the Order's Project Pronto Requirements is discussed in Mr. Keown's direct testimony on rehearing and his confidential Schedule JEK-4. Increased costs are also discussed by Mr. Waken and Mr. Hamilton in their direct testimony on rehearing. Mr. Ireland and Dr. Aron generally discuss how and why increased costs led SBC and Ameritech Illinois to conclude that the Order would make it economically infeasible to deploy Project Pronto DSL facilities in Illinois. While Mr. Keown's analysis relied on certain assumptions that tended toward a worst-case scenario, as is necessary for evaluating investment risk and making prudent business decisions, Mr. Ireland and Dr. Aron explained that cost projections alone did not drive SBC/Ameritech's decision. Rather, the loss of control over the investment and risks associated with the investment played a significant role. Am. Ill. Rhg. Ex. 1.1 (Ireland) at 2-3; Am. Ill. Rhg. Ex. 8.0 (Aron) at 31-35. Given the increased cost and risk, SBC/Ameritech may well have suspended deployment even if the projected costs had been only a small fraction of the costs computed by Mr. Keown.

B) *Would any of Ameritech-Illinois' claims of increased costs be valid absent a virtual collocation requirement for line cards? If so, please explain.*

Yes. While the line card "collocation" requirement would cause substantial increased costs, as Mr. Keown explained in his direct testimony on rehearing (at 18), the Order's "unbundling" requirement would also cause substantial increased costs. These increased costs would include costs of replacing stranded capacity, costs of changing OSS and back-office systems, costs arising from inefficient use of the Pronto network for unintended purposes, and other increased costs generally associated with providing and monitoring UNEs. Even Sprint's economist, Dr. Staihr, conceded that unbundling obligations always impose increased costs on the ILEC and that increased costs, especially with new investment, increase the ILEC's risk. Tr. 1789-91. Thus, removal of the "collocation" requirement would not eliminate the increased costs problem. The only way to adequately address the problem of increased costs and loss of control over the Pronto DSL investment would be to remove the Order's "unbundling" and "collocation" requirements and rely, as the FCC did, on the conditions of the *Project Pronto Order* to promote the 1996 Act's goals of advanced services deployment and competition.

10. ***Premature Exhaust.*** *Please comment on the technically feasible techniques for expanding fiber capacity between the central office and the remote terminal. Does Ameritech-Illinois have plans to utilize these techniques when additional capacity is needed?*

Mr. Boyer discusses possible means of expanding fiber capacity between the RT and central office in his rebuttal testimony on rehearing. Am. Ill. Rhg. Ex. 4.1 (Boyer) at 8-18. These include "unchaining" channel banks in the RT, using Wave Division Multiplexing ("WDM"), or replacing Litespan 2000 NGDLC systems with Litespan 2012 systems. Such options could increase the capacity of fiber, or the number of fiber OC-3s, between the RT and central office. These options, however, would not remove the capacity problems created by the Order's "unbundling" and "collocation" requirements.

The planned Pronto DSL architecture would use a single OC-3c optical fiber facility to carry all the data traffic from all three DSL-capable channel banks in the NGDLC at the RT. This arrangement was selected because (1) it conserves physical fiber capacity, (2) it minimizes the capacity impact on the OCD (for reasons discussed below), and (3) Pronto deployment is targeted primarily at high-speed Internet access for residential customers, and SBC's traffic engineers concluded that a single OC-3c would provide more than sufficient bandwidth to serve a fully-loaded Litespan NGDLC for such service. Am. Ill. Rhg. Ex. 4.1 (Boyer) at 11.

The options noted above would allow for one OC-3c for each separate channel bank, and each OC-3c would either be a separate facility to the CO (as with unchaining) or carried as a distinct signal on a single facility (as with WDM and using the Litespan 2012). While such alternatives would conserve physical fiber they would not in any way relieve the capacity problems that would arise from "unbundling" PVPs and PVCs, for two reasons.

First, even if more capacity (*i.e.*, more signals from more customers) could be placed on a single fiber for transport to the CO, once the signals reached the CO they still would have to be handed off to the OCD as separate OC-3c signals, each of which would require a separate port on the OCD. Am. Ill. Rhg. Ex. 4.1 (Boyer) at 12-13. Whereas the planned Pronto architecture would require only one port on the OCD per each RT (for the single OC-3c from the RT), using any of these other methods would require three ports. As Mr. Boyer explained, this would lead to capacity problems because OCDs have a limited number of ports, and that limited number could quickly be exhausted by additional OC-3cs. For example, in the planned Pronto DSL deployment, there would typically be 16-24 RTs per central office, meaning that there would be 16-24 OC-3cs. The OCD planned for deployment in Illinois can handle a maximum of 32 OC-3s, leaving 8 to 16 ports on the OCD to spare. With the alternatives mentioned above, however, there would be 48-72 OC-3c's coming in from the RTs (three per RT), which would instantly be more than the OCD could handle, thus requiring deployment of one or more extra OCDs in the central office, at substantial cost to Ameritech Illinois. Am. Ill. Rhg. Ex. 4.1 (Boyer) at 13. The same problem would exist even if the Litespan system could provide a higher form of transport, such as an OC-12. The OCD has only 16 ports capable of handling an OC-12, so, with 16 to 24 RTs feeding the CO, the OCD again would be immediately exhausted and new equipment would be required. *Id*. at 17-18.

Second, adding capacity to the fiber between the RT and the CO may conserve on fiber costs, but it does nothing to increase the *bandwidth* available between the two locations. Bandwidth is determined not by the fiber capacity alone, but also by the electronics at either end

of the fiber. *Id*. at 10-11. The Litespan electronics can provide only an OC-3c's worth of bandwidth per channel bank. So long as the bandwidth remains limited, the capacity-exhaust problems raised by "unbundled" PVPs (which could eat up bandwidth from a given channel bank and diminish its ability to serve other customers) still exist. Some CLECs have thus suggested that Ameritech Illinois would need to upgrade the electronics in the Project Pronto DSL architecture to support more bandwidth, but the fact is that (1) bandwidth is determined by the ABCU card in the Litespan channel bank, and Alcatel has no plans to increase the capacity of the ABCU card to support more than an OC-3c (*id*. at 16); and (2) the only other option would be to place stand-alone equipment in RTs, comparable to an OCD, to multiplex the OC-3c's output from the channel banks to a higher level facility. This is not a viable alternative for many reasons, including that it still runs into the port-exhaust problem at the OCD. *Id*. at 16-17.

Ameritech Illinois does not plan to use any of these techniques if the Pronto DSL facilities are deployed and used as intended, because the architecture was designed to be able to carry traffic efficiently from fully-loaded channel banks on a single OC-3c.

11. ***Interference Problems.*** *Please describe in detail the possibility of cross-talk or interference problems that could occur due to intermingling copper facilities with the NGDLC facilities of Ameritech-Illinois? Please provide specific and verifiable information and/or examples if possible. Will any standards-setting body be addressing this issue? Are the rules established in C.F.R. 47 Part 51.233 sufficient to address the possibility of NGDLC-caused interference should it occur?*

Mr. Keown addressed this issue in both his direct and rebuttal testimony on rehearing. Am. Ill. Rhg. Ex. 10.0 (Keown) at 20; Am. Ill. Rhg. Ex. 10.1 (Keown) at 11. As he explained, the issue of potential interference is currently being evaluated by standards committee T1E1 of the Alliance for Telecommunications Industry Solutions. It also is being addressed by the Network Reliability and Interoperability Council, which was charged by the FCC in its *Line Sharing Order* (at ¶ 184) with monitoring standards bodies' activities related to DSL interference. Although the issue of potential "cross talk" is being considered by various bodies, the significant point is that, at present, there is no empirical evidence of such problems, and no regulatory or industry body has concluded that such a problem will in fact occur. Indeed, the CLECs have not pointed to any specific examples or verifiable information supporting the possibility of cross-talk problems; rather, they rely on pure speculation. Moreover, SBC's research arm, TRI, has looked into this issue and devised a solution in case any problems are found to exist, and that solution has been implemented by the SBC ILECs. Am. Ill. Keown Direct Rhg. Ex. 10; Rhg. Tr. 2007-08 (Keown).

Notably, even if such "cross-talk" problems were found to potentially exist, the same problem would exist every time a CLEC collocated a DSLAM at an RT. The DSL signal transmitted by a CLEC's remotely located stand-alone DSLAM would introduce the same power level into Ameritech Illinois' copper distribution subloops as the DSL signal transmitted by the Project Pronto NGDLC. In other words, the problem would arise from CLECs' as well as ILECs' placement of facilities at an RT and would affect all DSL providers equally.

By the same token, 47 C.F.R. 51.233 addresses the possibility of degradation of services caused by the deployment of advanced services. That provision would adequately address any interference problem that might result from the intermingling of copper facilities with the

NGDLC facilities of Ameritech Illinois. At present, however, such situations are merely hypothetical.

12. ***TELRIC Pricing*****:** *Please provide the cost studies and all supporting documentation and assumptions SBC/Ameritech has developed to arrive at the TELRIC rates found in Attachment 1A of SBC/Ameritech's Accessible Letter No. CLECAM00-044.*

Ameritech Illinois has submitted both the recurring and nonrecurring cost studies for its Broadband Service offerings in Illinois.[12] Ms. Cherylann Mears sponsored the recurring cost study, and Mr. Christopher Cass sponsored the nonrecurring cost study. Both Ms. Mears and Mr. Cass explained that they conducted their studies using the TELRIC methodology. Am. Ill. Rhg. Ex. 7.0 (Mears) at 3; Am. Ill. Rhg. Ex. 12.0 (Cass) at 2. Their testimony also outlines the assumptions upon which the studies were based. Am. Ill. Rhg. Ex. 7.0 (Mears) at 6-9; Am. Ill. Rhg. Ex. 12.0 (Cass) at 4-7. Ameritech Illinois has already provided the bulk of the supporting documentation for the studies to the CLECs and Staff via discovery. The CLECs did not contest or object to the studies. However, Ameritech Illinois believes that three issues regarding the studies raised by Staff witness Robert Koch warrant brief comment here.

First, the recurring cost of the Combined Voice and Data Broadband Service offering is higher than the cost of unbundled loops because that offering requires additional equipment and configurations that are not used to provide unbundled loops. Am. Ill. Rhg. Ex. 7.1 (Mears) at 1. Even though the Combined Voice and Data Service and an unbundled loop can both use Litespan 2000 technology, the Litespan 2000 equipment must be configured for ADSL service in order to provide the Combined Voice and Data Broadband Service. Am. Ill. Rhg. Ex. 7.1 (Mears) at 1-2. The ADSL-equipped Litespan 2000 equipment contains an ADLU card that separates the data and voice transmissions. *Id.* at 2. Also, the ADSL-equipped Litespan 2000 has three channel banks reserved for the data services. *Ibid.* These equipment additions are not used to provide an unbundled loop using Litespan 2000. *Ibid.*

Second, the Broadband Cost study does not double-recover the cost of the ADLU card. *Ibid.* Rather, the ADLU card investment has been weighted between data and voice in the two different studies. *Ibid.* In fact, all of the Litespan 2000 investments for components that are required for both data and voice have been weighted. *Ibid.*[13]

Third, as to the nonrecurring Broadband Service cost studies, Mr. Cass explained that Ameritech Illinois properly includes disconnection costs in those studies because Ameritech Illinois will incur disconnection costs when CLECs disconnect individual Broadband Services. Am. Ill. Rhg. Ex. 12.1 (Cass) at 3. These costs are forward-looking, are compliant with the TELRIC rules stated by the FCC, and therefore should be recovered by Ameritech Illinois. *Ibid.*

[12] Although Ameritech Illinois has provided the Broadband Service cost studies in response to Commissioner Squires's Questions, it acknowledges that it has not requested that the costs of the Broadband Service be set in this proceeding, nor have the CLECs. Tr. 1555-57.

[13] Staff witness Mr. Koch also objected to the recurring study's HFPL sub-loop element cost assumptions, and argued that the rate for that element should be $0. For the reasons stated in Ameritech Illinois' Brief on Rehearing, that rate should be set at 50% of the unbundled sub-loop price.

13. ***FCC Initiative:*** *Please comment on the status and expected end date for the FCC's Collocation NPRM and NGDLC FNPRM?*

The FCC issued a news release relating to the *Collocation NPRM* on July 12, 2001. That document does not indicate that the FCC will address collocation in RTs, but the actual order is expected to be released soon. The *NGDLC FNPRM* is ongoing with no announced date for decision.

REHEARING ISSUE #8: $0 RATE FOR HFPL

14. *Please respond to the following regarding a $0 rate for the HFPL:*

A) *Is there a workable solution to reduce the network access line rate paid by a voice customer to Ameritech-Illinois when the CLEC provides data over the HFPL? If so, please describe. If not, is there an alternative method the ICC can use to ensure that Ameritech-Illinois is not afforded a windfall if a non-zero rate is established for the HFPL?*

As a preliminary matter, it should be clarified that the Commission cannot consider retail rates when setting UNE prices, including the price of the HFPL UNE. Indeed, Section 252(d)(1) of the Act states that a commission's determination of UNE prices *shall* be "based on the cost (*determined without reference to a rate-of-return or other rate-based proceeding*) of providing the network element" and "may include a reasonable profit." (Emphasis added). In other words, determining the charge applicable to the CLECs for the purchase of the HFPL UNE depends on the cost of providing the UNE, not on the retail charge an end-user pays for voice service.[14] Under the law, Ameritech Illinois' retail prices and revenues are not (and cannot be) an issue in this proceeding.

Even if the Commission has concerns that allocating part of the loop cost to the HFPL could cause an over-recovery of loop costs in total, the proper solution, both as a matter of law and policy, is not to set a zero price for the monthly recurring HFPL charge. Among other reasons, there is no evidence in the record that Ameritech Illinois is in fact recovering the entire cost of the loop in retail rates. In fact, the record suggests that just the opposite is true. As explained fully in Ameritech Illinois' Brief on Rehearing (§ V), given the current state of competition and the fact that Ameritech Illinois is subject to alternative (not rate-of-return) regulation, it is highly unlikely that Ameritech Illinois fully recovers the cost of the loop in retail rates. Under such circumstances, setting the price of the HFPL UNE at zero would not satisfy the TELRIC standard, nor would a zero charge for the HFPL UNE satisfy the constitutional requirement that "just compensation" be paid when private property is taken.

In order to avoid an unlawful taking of Ameritech Illinois' property, what the Commission should do, if it is concerned about over recovery of loop costs, is consider the issue

[14] Significantly, in its Order approving the SBC/Ameritech merger, the FCC necessarily found that any potential for recovery of such so-called "loop costs" through retail rates was irrelevant, when it established a surrogate HFPL UNE price of 50% of the cost of an entire unbundled loop when the HFPL UNE was not available. *Applications of Ameritech Corp. and SBC Communications, Inc.*, 14 FCC Rcd 14712, ¶ 476; Appendix C (Conditions Appendix), ¶¶ 8, 14 (rel. Oct. 8, 1999) ("*SBC/Ameritech Merger Order*") (emphasis added).

in a separate proceeding directed at Ameritech Illinois' retail rates. Indeed, in order to determine whether Ameritech Illinois is recovering the full cost of the loop in retail rates, it would be necessary to look at, among many other things, current long run service incremental costs ("LRSIC") plus shared costs for local exchange (voice) access lines, the relationship between current rates and these LRSIC plus shared costs, and what (if any) common costs are currently recovered by local exchange access lines. It also would be necessary to determine what impact the revenues resulting from HFPL services, based on proper HFPL prices and projected demand, would have on the overall recovery of loop costs. In addition, past and current policy-based factors, such as any universal support flows to local exchange service rates that might exist, and the implications of such universal support flows on local exchange rates, would need to be examined. Conducting a separate proceeding is a logical way to ensure that Ameritech Illinois is not enjoying a windfall while, at the same time, ensuring that Ameritech Illinois is not unlawfully denied compensation for its property.

B) *In other jurisdictions where a $0 rate for the HFPL has been ordered, have these decisions been legally challenged and/or successfully overturned?*

Although Commissioner Squires's question asks only about jurisdictions that have adopted a zero price for the HFPL UNE, it is important to point out that several jurisdictions have adopted a *positive* price for the HFPL. Specifically, the Connecticut,[15] Washington[16] and California[17] Commissions rejected CLEC attempts to set the price of the HFPL UNE at zero.

Indeed, the Connecticut Commission held that the ILECs' "proposed allocation of 50% of the local loop costs is reasonable for the high frequency portion of the loop." *Conn. PUC Decision* at *55. In support of its conclusion, the Connecticut Commission stated that "loop costs can be reasonably allocated among the services that use the loop. Obviously, the loop was constructed for more than basic local exchange service and cannot be considered the sole cost responsibility of basic local exchange service. New users of the loop must be encouraged and should reasonably share in the cost of providing the loop." *Id.* at *55-56. Notably, consistent with Ameritech Illinois' position in this case, the Connecticut Commission found that "[t]he argument of Rhythms and other parties that the incremental cost of providing the high frequency portion of the loop is zero is not particularly useful." *Id.* at 55.

Similarly, the Washington Commission found:

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[15] Decision, *Application of Southern New England Telephone Company for a Tariff to Introduce Unbundled Network Elements*, Docket No. 00-05-06, 2001 Conn. PUC LEXIS 141 at *20 (Conn, Dept. of Pub. Util. Control, June 13, 2001) ("*Conn. PUC Decision*").

[16] Thirteenth Supplemental Order, *Costing and Pricing of Unbundled Network Elements, Transport, and Termination*, Docket No. UT-003013, 207 P.U.R.4th 379 at *70 (Wash. Util. and Transp. Comm., January 31, 2001) (adopting a flat rate of $4.00 for the use of the high frequency portion of the loop) ("*Wash. Thirteenth Supp. Order*").

[17] Interim Opinion, *Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominate Carrier Networks*, Rulemaking 93-04-0003, *Investigation on the Commission's Own Motion Into Open Access and Network Architecture Development of Dominant Carrier Network*, Investigation 93-04-002, 2000 WL 1875844 at *11 (Cal. Pub. Util. Comm., Sept. 21, 2000) (adopting on an interim basis a charge of $5.85 per month for Pacific, and $3.00 per month for GTE for use of the high frequency portion of the loop) ("*Cal. Interim Opinion*").

> Consistent with the FCC's requirement that all UNEs make a contribution toward shared costs, we establish a non-zero HFPL price. . . . We find that the loop is a shared cost used by voice and advanced telecommunication services. LECs provisioning advanced telecommunication services should provide a contribution to the cost of the loop in the same way in that LECs provisioning voice services made a contribution to the cost. Because the loop is used to provide both basic exchange and advanced services, recovering the entire cost of the loop from voice services would violate Section 254(k) of the Act. Because the cost of the loop is considered to be a shared cost for the provision of voice and advanced services, we conclude that a portion of the cost of the loop should be recovered from LECs providing advanced services and specifically digital subscriber line services. We base this conclusion on FCC pricing guidelines, our reading of the 1996 Telecommunications Act, the Commission's prior orders, and our rejection of argument that there is a zero cost associated with providing the HFPL.

Wash. Thirteenth Supp. Order at *15-16.

Additionally, the California Commission found that "a zero rate is not in the public interest, convenience, and necessity," and therefore "reject[ed] a zero rate in the interim." *Cal. Interim Opinion* at *8. In support of its positive interim price, the California Commission stated that "the Act requires that UNE rates be just, reasonable and nondiscriminatory" and "it is presumptively unreasonable to find a just, reasonable, and nondiscriminatory interim rate . . . for use of the high frequency portion to be zero." *Id.* at *10. Notably, the California Commission rejected the notion that the HFPL UNE price must be set at the amount the ILEC allocated to ADSL services (which was zero), stating that paragraph 139 of the *Line Sharing Order* (in which the FCC stated that a commission setting interim prices subject to later true-up adjustment may require the ILEC to charge no more to CLECs than the amount of loop costs the ILEC allocated to ADSL services when the ILEC established its interstate retail rates) is permissive, not mandatory, and that other factors also should be considered. *Id.*

In particular, the California Commission stated that the FCC-adopted TELRIC methodology does not directly address the issue of pricing a line-shared loop. The California Commission also stated that the ILECs' ADSL allocations were for the purposes of setting price floors, or minimal charges, and that rates may be higher. *Id.* The California Commission added:

> Even if ILECs allocated no direct costs in years past when they established price floors for their ADSL retail services, this does not necessarily make zero a correct TELRIC calculation today for data transport over the local loop in the year 2000 and beyond. That is, it is not unreasonable that TELRIC for the loop calculated today based on a system designed to service all of a customer's needs, including data as well as voice, might include some costs (e.g., capital, profit, economic depreciation, common, joint) for services other than voice. In fact, if transport of data is the future of

> telecommunications, it may be that xDSL services on the high frequency portion of the local loop cause all future loop costs, and voice services cause none. We agree with the result of the interim arbitration that we need not decide this now. At the same time, it would be unreasonable to find for purposes of the interim arbitration that zero cost is appropriate for, and no contribution is reasonable to, the local loop related to any TELRIC cost element, including, but not limited to, cost of capital, profit, economic depreciation, joint costs, and common costs.

Id. at 11.

In contrast to the above decisions, several state commissions have adopted a zero price for the HFPL UNE, including Kansas, New York, Missouri, Texas, North Carolina and Minnesota. The decisions of the Kansas, New York, Missouri and Texas commissions, however, are *interim only*. While the Minnesota and North Carolina Commissions have set the permanent price for the HFPL UNE at zero, the Minnesota Commission just issued its decision on July 24, 2001, and the North Carolina Commission issued its decision on June 7, 2001. Therefore, the outcome of any appeal of those decisions is yet to be determined. Notably, the Michigan Public Service Commission appears to have taken a different approach than other state commissions. Specifically, the Michigan Commission held that Ameritech Michigan may either set the recurring charge for the HFPL UNE at zero or may set it at up to one-half of the unbundled loop price if it credits an equal amount to line sharing customers. In other words, if Ameritech Michigan charges a data CLEC $5.00, Ameritech Michigan must credit the voice customer $5.00.[18]

REHEARING ISSUE #9: DIRECT OSS ACCESS

15. ***Direct OSS Access:*** *Please list all systems/interfaces included within Ameritech-Illinois' OSS system [i.e., preorder, order, provisioning, maintenance/repair, and billing]. Please include in this list the following factors pertaining to these systems:*

A) *A detailed description of the information included within these systems, denoting the information that is proprietary in nature;*

See Attached matrix and Attachment B to Am. Ill. Rhg. Ex. 13.0 (Waken).

B) *The similarities and differences between providing "direct access" to the functions of OSS as opposed to EDI or GUI access to those functions? For example, what information or benefits would direct access provide that EDI or GUI access would not? Of this information, please justify what is needed via direct access and why?*

Direct access to Ameritech Illinois' back office systems will have a significantly different effect on those systems than if the information in those systems were accessed via front-end OSS

[18] Opinion and Order, *Application of Ameritech Michigan for approval of cost studies and resolution of disputed issues related to certain UNE offerings,* Case No. U-12540 (Mich. Pub. Serv. Comm., March 7, 2001).

gateways, as the CLECs do today. As explained fully in Ameritech Illinois' Brief on Rehearing, direct access to Ameritech Illinois' back-office systems will expose those systems to more inquiries and more extensive use than if CLECs used front-end OSS gateways to obtain the information in the back office systems.[19] Ameritech Illinois' back office systems, however, were not designed to accommodate such use,[20] and the additional inquiries and users that would come about with direct access to back office systems could slow down the processing of all service orders, or could cause the systems to fail. Am. Ill. Ex. 2.1 (Jacobson) at 14; Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 12-13; Am. Ill. Rhg. Ex. 9.1 (Mitchell) at 5-7; Tr. at 877-880; Rhg. Tr. at 1711-12 (Mitchell), 2575-78 (Waken).

The CLECs nevertheless argue that the number of queries in the back-office systems will be the same, regardless of whether the CLECs directly access the back office systems or access them via gateways, and therefore the effect on the back office systems should be the same under either scenario. This simply is not true. Ameritech Illinois' front-end OSS gateways minimize the negative impact that large volumes of queries, as well as overly complex queries, could have on the back office systems. Front-end OSS gateways only permit certain types of queries to be made in the back office systems, and act as a sort of buffer between the gateway user and the back office systems. Specifically, on a loop qualification inquiry, the front-end OSS gateway is going to reject any query that is inappropriate before it hits the back office system. In contrast, with direct access, there would be no mechanism to prevent improper queries from being made in the back office systems. For example, if 100,000 queries were made by CLECs and 10 percent of those were invalid, the gateway would never send those 10,000 invalid queries to the back office system and, therefore, the back office system would see 10% fewer queries than if all 100,000 queries (valid and invalid) were made directly to the back office system. Rhg. Tr. 2575-78. The front-end OSS gateway also will send queries to two different middleware systems, AEMS and SAM, which direct the queries to specific areas of the back-end systems necessary for the return of the appropriate information. In contrast, with direct access, there is no mechanism to prevent queries from being made in the wrong back-end system. Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 12-13; Am. Ill. Rhg. Ex. 9.1 (Mitchell) at 5-7; Rhg. Tr. 1711-12 (Mitchell), 2575-78 (Waken).

Aside from the additional queries that would occur in the back office systems, if CLECs are permitted to directly access Ameritech Illinois' back office systems, multiple service representatives of multiple CLECs presumably would be logged into the back office systems for eight hours or more a day. Back office systems currently are not exposed to such use. Rather, when an OSS gateway is used, it only makes a hit in the back office system when it receives an inquiry. The information is sought in the system and, when it is found, the back office system is exited. Tr. 874-75 (Jacobson); Rhg. Tr. 1711-12 (Mitchell), 2575-78 (Waken); Am. Ill. Rhg. Ex. 9.1 (Mitchell) at 7. Additionally, Ameritech Illinois employees that have direct access to Ameritech Illinois' back office systems (although small in number when compared to the total number of Ameritech Illinois employees or the potential number of CLEC representatives that would directly access Ameritech Illinois' systems under the CLECs' proposal) are automatically

[19] Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 12-13. As Mr. Waken testified, the number and complexity of queries made in the back office systems may cause the systems to slow down or fail. Rhg. Tr. 2637.

[20] Ameritech Illinois' back office systems were not designed to accommodate direct access by CLECs, but were designed to store information. For this reason, back office systems have severe capacity limitations.

logged off the back office system whenever there is a certain amount of inactivity in the system. This policy is in place for security reasons, as well as to avoid consuming system resources – which, of course, would slow down the system for other users. Rhg. Tr. 2639 (Waken).

As the above demonstrates, direct access to Ameritech Illinois' back office systems would result in more queries in those systems and higher use of the systems' resources. The back office systems, however, are not designed for such extensive use. Ameritech Illinois' OSS interfaces, gateways and GUIs serve to protect the back office systems from the dangers of direct access, while providing CLECs with all the loop qualification information they need to provision service. CLECs should continue using these mechanisms to access the information in Ameritech Illinois' back office systems.

In terms of the information that could be obtained with direct access as compared to gateways access, there is no evidence that CLECs would be able to obtain through such direct access any additional loop qualification information beyond that which they already receive from Ameritech Illinois via front-end OSS gateways. As the record establishes, Ameritech Illinois' front-end OSS gateways do not filter any loop qualification information or other information to which CLECs are legally entitled. Rather, the OSS gateways will always be programmed to retrieve all data to which the CLECs are legally entitled. Am. Ill. Rhg. Ex. 13.0 (Waken) at 18-21. The only additional information CLECs will receive with direct access to Ameritech Illinois' back office systems is non-OSS-related, confidential information of end-user customers, other CLECs, and Ameritech Illinois – information that CLECs are not legally entitled to access. Disclosure of such information, not only is unnecessary for the CLECs to provision DSL service, but it creates a security risk for end-users, and enables CLECs to improperly use commercially sensitive information for marketing or other improper purposes. Am. Ill. Rhg. Ex. 13.0 (Waken) at 9-14.

Significantly, although Commissioner Squires's Question No. 15.B requests that the CLECs identify what information they need via direct access and why it is needed, the CLECs' have failed to identify any such information. Indeed, although the CLECs have conducted an audit of Ameritech Illinois' back office systems, they have not identified any loop qualification information that they need to provision service that is not already provided by Ameritech Illinois. Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 46. The reason for this failure is clear – there is no such information.

Perhaps more importantly, even if the CLECs identified a legitimate piece of loop qualification information that CLECs need to provision service that they are not already receiving from Ameritech Illinois, as both a legal and policy matter, the solution is *not* to permit CLECs to directly access Ameritech Illinois' back office systems in order to obtain that information. Rather, that information should be provided to CLECs through Ameritech Illinois' electronic interfaces, gateways, and GUIs, just as all loop qualification information is provided today. As Ameritech Illinois represented throughout this proceeding, if the CLECs demonstrate that the loop qualification information provided through Ameritech Illinois' gateways needs to be supplemented, Ameritech Illinois would go through the Change Management Process and modify its OSS interfaces, gateways and GUIs in order to accommodate the CLECs' legitimate need for additional loop qualification information. The CLECs, of course, have not made such a showing. Rhg. Tr. 2562. Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 46.

Putting aside the fact that direct access will not provide CLECs with any additional loop qualification information, there simply is no benefit to directly accessing back office systems instead of using electronic interfaces, gateways and GUIs. Among other reasons, information can be obtained much more quickly with gateways than with direct access. If a CLEC were to directly access a back office system, it could take fifteen to twenty minutes, if engineering records are in an electronic format, just to obtain one piece of loop qualification information. This task would become even more time consuming if a CLEC wanted to place a service order. Indeed, if a CLEC wished to place a service order after obtaining information from Ameritech Illinois' back office systems, the CLEC would have to exit the back office systems, enter an OSS gateway to create an LSR from scratch, translate the information obtained from the back office systems into the correct ordering format, and manually insert that information in a newly created LSR. Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 9-10; Am. Ill. Rhg. Ex. 13.0 (Waken) at 17. In contrast, with access to loop qualification information via Ameritech Illinois' OSS interfaces, gateways and GUIs, such delays would not occur. Ameritech Illinois has designed the Loop Qualification system to return all 45 loop qualification elements, if available, to the requesting CLECs in 120 seconds or less, and that information is returned in the proper format for use in the LSR. Am. Ill. Rhg. Ex. 13.0 (Waken) at 18, 20.

The information available to CLECs with direct access also would be more difficult to use and understand than information gathered with the gateways. The databases to which the CLECs seek direct access have developed and changed over decades, and each back office system has its own language, methods and procedures, and the format in which information is stored varies from region to region. Moreover, even if the CLECs could decipher the information obtained directly from the back office systems, the information still would have to be translated into a LSR format for ordering. In contrast, electronic interfaces, gateways and GUIs convert the information in the back office systems into standardized fields that can be recognized by all CLECs. Additionally, unlike back office systems, Ameritech Illinois' interfaces and gateways return information in the proper format for ordering. Am. Ill. Rhg. Ex. 13.0 (Waken) at 17-20; Am. Ill. Rhg. Ex. 9.0 (Mitchell) at 11-12.