

## F. Material Differences in Cost, Availability, and Quality

The Commission asked for comment on how it should evaluate differences in such factors as cost, availability, and quality. <sup>56/</sup> These differences are “material” if they affect the ability of a competitor to serve its intended customers with the services that the competitor chooses to offer, and to do so on a profitable basis.

Differences in cost are relevant, certainly, because material cost differences could make the difference between profitability and loss. Material differences in input prices also obviously affect a CLEC’s ability to compete with the ILEC because those input price differences affect the CLEC’s ability to compete on retail price with the ILEC. Since the new entrant generally has to underprice the incumbent to win the business anyway, differences in input price can mean the difference between success and failure in the marketplace. The same holds true for differences in quality, delays in provisioning, and so on.

That being said, however, under the approach we have proposed, it would not be necessary to define with great precision what a “material” difference would be. The wholesale market test is largely a qualitative, not quantitative, test. Once there is interchangeability and a sufficient number of wholesale providers to create an effectively competitive wholesale market for a network element across a sufficiently large geographic area, it becomes less important to determine, for example, whether the price generated by the wholesale market is comparable to the

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<sup>56/</sup> Id. at ¶ 21.

ILEC network element price. Both should be priced at a competitive level -- thus, at cost. 57/

The concept of interchangeability, which is largely an operational concept, also does not generally require fine distinctions to be made. In general, either an element is or is not interchangeable with the ILEC's element. The existence of numerous wholesale providers would be one indication of the presence of interchangeability. It also would be evidence that there are no material differences in price, quality, and speed of provisioning as compared to the ILEC (assuming, of course, that CLECs are not using non-ILEC wholesale providers because the ILEC is not living up to its obligations to provide cost-based network elements on a nondiscriminatory basis).

The existence of self-supply alone, however, would not be evidence that there are no material differences in price, quality, and speed of provisioning between competitively supplied elements and ILEC elements. While for some CLECs, in some locations, to serve some customers, it may be cost-justified to install their own local facilities, this does not mean that there are no material differences between those facilities and those of the ILEC when those facilities are used to serve other customers or in other locations, or are used by other CLECs. As discussed above, impairment can exist in the face of self-supply.

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57/ Network element pricing at TELRIC should be roughly equivalent to the price that would be generated by an effectively competitive market, because TELRIC prices are established on the basis of forward-looking cost.

The “wholesale market” test thus easily satisfies the Supreme Court’s decision requiring the Commission to consider whether “any” difference in cost or quality should constitute “impairment” under Section 251(d)(2).

**V. ACCESS TO THE PROPRIETARY COMPONENTS OF A NETWORK ELEMENT ARE “NECESSARY” IF A MATERIAL LOSS IN THE FUNCTIONALITY OF THE ELEMENT WOULD RESULT WITHOUT SUCH ACCESS.**

The terms “proprietary” and “necessary” in Section 251(d)(2)(A) of the 1996 Act require a two-part analysis. First, the Commission must determine whether a network element contains a proprietary component. Second, if so, the Commission must determine whether the lack of access to that proprietary component would cause a *material loss in the functionality* of that network element. If the answer to this second inquiry is yes, access to the proprietary component is “necessary.” The analysis of whether an element has a proprietary component under Section 251(d)(2)(A) need only be made if the Commission has already concluded that requesting carriers would be “impaired” under Section 251(d)(2)(B) without access to that element.

**A. “Proprietary”**

There is no reason for the Commission to change its treatment of the term “proprietary” in the Local Competition Order. **58/** The proposed CompTel rule

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**58/** Local Competition Order at ¶¶ 283-84. The Commission’s order on this point was reasonable, and neither the Eighth Circuit nor the Supreme Court questioned it. The Supreme Court decision went to the meaning of “necessary,” not to the meaning of “proprietary.”

makes it clear that the Commission's inquiry is whether a component of a network element is proprietary, not whether the element itself is proprietary. 59/

The Commission also should make clear in this proceeding that the term "proprietary" refers solely to proprietary interests the ILEC may have in components of network elements, not to proprietary interests of third parties. The proprietary interests of third parties in components of network elements are protected by other means, just as they are protected when accessed by the ILECs in their use of network elements.

**B. "Necessary"**

The Commission reaches the "necessary" portion of the analysis only if it determines that a component of a network element is proprietary. Access to a component of a network element should be considered "necessary" if lack of access to that component would cause a *material loss in the functionality* of the network element. 60/

In the case of switch routing tables, for example, assuming for the sake of argument that such tables properly could be considered proprietary, it is clear that without access to the routing instructions in the switching element, the

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59/ This is consistent with the Commission's understanding of the possible proprietary characteristics of some network elements. See, e.g., Local Competition Order at ¶ 284 (proprietary information contained within an ILEC database).

60/ In the Local Competition Order, the Commission interpreted necessary as meaning that "an element is a prerequisite to competition." Id. at ¶ 282. The Supreme Court asked the Commission to take another look at this rationale. AT&T v. Iowa Utilities Board, 119 S.Ct. at 734, 736.

usefulness of that element would be greatly reduced. If there is a material loss in the functionality of that element when access to the proprietary component is denied, then such access is “necessary” in order for the requesting carrier to use the network element. In the case of the switching element, without access to the routing instructions, there would be a material loss in its functionality and thus access to that proprietary component is necessary for competitors to obtain access to the functionality of the element itself.

## **VI. THE PROCESS FOR ESTABLISHING, ADDING, AND REMOVING UNES FROM THE MANDATORY LIST**

### **A. The FCC Should Establish National Rules.**

It is essential that the FCC adopt in this proceeding a set of mandatory network elements applicable on a nationwide basis. State-by-state assessments of (a) whether a wholesale market has developed for a network element in a given MTA or (b) whether a network element component is proprietary, and if so, necessary under Section 252(d)(2)(A) would impose prohibitive burdens on competitive carriers. The same is true for attempts to carve out limited geographic areas in which network elements might be unavailable.

In the Local Competition Order, the Commission found that, for a variety of reasons, national rules are critical to the development of local competition in the telecommunications marketplace. 61/ For example, the Commission found that uniform, national rules are important because they can address the issue

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61/ Local Competition Order at ¶¶ 53-62.

unequal bargaining power between ILECs and new entrants more directly than individual state rules can. 62/ The Commission also found that fair negotiations among carriers and state arbitrations of interconnection agreements will be expedited and simplified by the existence of national rules. 63/ In addition, the Commission held that national rules are desirable because they create efficiency and predictability, thereby making it easier for carriers to facilitate entry decisions. 64/ According to the Commission, national rules also reduce the need for new entrants to design costly multiple network configurations and marketing strategies to allow for more efficient competition which, in turn, benefits consumers. 65/ Perhaps above all else, national rules simply reduce the need for competitors to revisit the same issues in 51 different jurisdictions, thereby reducing administrative burdens and litigation for all carriers. 66/

Significantly, the Commission found that the creation of national rules is consistent with the terms and goals of the 1996 Act. 67/ The Commission also found that national standards for local entry are helpful in enabling the Commission, the Department of Justice, the states, and even the ILECs to carry out

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62/ Id. at ¶ 55.

63/ Id. at ¶ 56.

64/ Id.

65/ Id.

66/ Id.

67/ Id. at ¶ 54

their responsibilities under the 1996 Act. 68/ The Supreme Court's decision in AT&T v. Iowa Utilities Board reinforces these conclusions. In upholding the Commission's jurisdiction to impose rules for local market entry, despite the existence of Section 2(b), the Court made it clear that the FCC possesses the authority to establish federal telecommunications policy and to adopt federal rules to create consistent market-opening obligations for all ILECs. 69/

In sum, national network element rules are needed and fully authorized under the 1996 Act.

**B. The FCC Should Decide When Elements Come Off the List, With a Consultative Role by States.**

In addition to establishing the initial national list of mandatory network elements, the Commission also should be responsible for determining when an element should come off the list because impairment no longer exists (that is, when interchangeability has been accomplished and a wholesale market has developed). However, the state commissions can and should have an important role in developing the factual record needed to determine whether a wholesale market has developed in a particular geographic area.

It is essential that the FCC have the job of determining when it is time to take an element off the list. First, giving the FCC this role is consistent with the structure of the Act and the plain language of Section 251(d)(2), which contemplates

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68/ Id. at ¶ 57.

69/ See AT&T v. Iowa Utilities Board, 119 S.Ct. at 729-33.

that the Commission will decide when an element is required under the “necessary and impair” test. Second, the FCC should decide when elements come off the list in order to ensure consistent nationwide rules for local competition, and to ensure that CLECs in every state have the full protection of the Act.

Third, the resource implications for CLECs of giving state commissions the ability to take elements off the list would be enormous. Few CLECs could afford to repeatedly defend against petitions requesting the elimination of the availability of each network element in every state in which the CLEC wishes to provide service. Indeed, ILECs already are suggesting that state commissions should require CLECs to respond to lengthy and burdensome “information requests” demonstrating their need for network elements and the availability of network elements. 70/ Small and medium CLECs simply do not have the resources to negotiate, arbitrate, and file complaints with state commissions for *every* UNE, in *every* locality, for *every* end office, and for *each* particular customer the CLEC seeks to serve. 71/ Moreover, ILECs could easily force CLECs into protracted negotiations

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70/ See, e.g., Local Competition TSFT Process, New Jersey Board of Public Utilities Docket Nos. TX98010010, et al., Bell Atlantic-New Jersey Reply Comments, at p. 9 and Exhibit 1.

71/ See Investigation of Southwestern Bell Telephone Company’s Entry into the InterLATA Telecommunications Market, Texas Public Utility Commission, Project No. 16251, Comments of Premier Network Services, Inc. (filed Feb. 22, 1999), at 10-11. See also Investigation of Southwestern Bell Telephone Company’s Entry into the InterLATA Telecommunications Market, Texas Public Utility Commission, Project No. 16251, Southwestern Bell Telephone Company’s Response to Questions Regarding the Effect of the Supreme Court’s Decision in AT&T Corp. v. Iowa Utilities Board (filed Feb. 15, 1999), at 10-11; Proceeding on Motion of the Commission to Examine Methods by Which Competitive Local Exchange Carriers Can Obtain and Combine Unbundled Network Elements, et al., New York Public

and litigation even where the ILEC knows it will lose because the delay would be sufficient to cause potentially irreparable harm to the CLEC. 72/ In short, the expenses and delays of such pervasive and unnecessary litigation would raise new entrants' costs and create investor uncertainty, thus raising barriers to entry for competitive carriers.

At the same time, the state commissions can and should play a valuable consultative role in the Section 251(d)(2) determination process similar to the consultative role they play under Section 271 of the 1996 Act. 73/ The FCC should adopt rules that provide for such a role. For example, the Commission could provide in its rules that states shall develop the factual record on the number of wholesale providers in an MTA and thus provide input on the question whether a wholesale market has developed for a particular network element in that MTA.

**C. The States May Add UNEs to the Mandatory Network Element List Through Their Arbitrations of Interconnection Agreements and Pursuant to State Law.**

As part of their obligation to arbitrate interconnection agreement disputes under Section 252(b), state commissions have the ability -- and indeed the duty -- to determine whether an additional network element should be made

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Service Commission, Case Nos. 98-C-0690, 95-C-0657, Comments of Bell Atlantic-New York (filed March 4, 1999), at 8-9 (suggesting that UNE availability should be determined at this micro level).

72/ Investigation of Southwestern Bell Telephone Company's Entry into the InterLATA Telecommunications Market, Texas Public Utility Commission, Project No. 16251, Comments of Premier Network Services, Inc. (filed Feb. 22, 1999), at 11.

73/ 47 U.S.C. § 271(d)(2)(B).

available by an ILEC. For example, if a requesting carrier identified a new capability of the ILEC network, the carrier could request access to that capability under Section 251(c)(3). If the ILEC refused to offer that element, the requesting carrier has the right to seek arbitration before the state commission of that denial. In arbitrating interconnection agreements, the states must apply the FCC's "necessary" and "impair" standards when considering the addition of network elements, as the FCC made clear in the Local Competition Order. <sup>74/</sup>

Apart from any authority state commissions might have in their implementation of the federal act, state commissions also may have the authority to augment the FCC's mandatory list of network elements pursuant to state law. In taking action under state law, state commissions are not bound to apply either the "necessary" and "impair" tests under the 1996 Act or the FCC's standards for doing so. State commissions do not have the power, however, to *remove* network elements from the FCC's mandatory list, as this would be equivalent to depriving requesting carriers of a federal right.

## **VII. THE "AT A MINIMUM" LANGUAGE GIVES THE FCC LATITUDE TO CONSIDER OTHER FACTORS.**

Section 251(d)(2) directs the Commission to "consider, at a minimum," the necessary and impair conditions in prescribing mandatory network elements. The Commission need not revisit the question of what additional authority it might have under the Section 251(d)(2) "at a minimum" language to consider other factors

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<sup>74/</sup> Local Competition Order at ¶ 244; 47 C.F.R. § 51.317.

tin determining which network elements must be unbundled by ILECs. The Commission correctly concluded in its 1996 Local Competition Order that the “at a minimum” language permitted it to consider factors in addition to the factors specified in Section 251(d)(2)(A) and (B). 75/ Nothing in the Supreme Court’s decision requires it to reexamine that conclusion, since the Commission did not rely on that language in creating Section 319 of its rules. 76/ In addition, the wholesale market test for “necessary and impair” proposed by Qwest is more than adequate to bring each of the network elements advocated by Qwest within the list of mandatory elements, without the need to reach the question of the Commission’s authority to consider other factors under the “at a minimum” language.

If the Commission nevertheless does decide to revisit its original interpretation of this statutory language, then it should again conclude that the words “at a minimum” operate to expand the considerations that would support classification of a network element as mandatory. These words were not superfluous. Congress must have intended the term “at a minimum” in Section

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75/ Id. at ¶¶ 280, 286 (“The standards set forth in Section 251(d)(2) are minimum considerations that the Commission shall take into account in evaluating unbundling requirements.”). The Commission did not make it clear in the Local Competition Order whether those factors could operate to limit the availability of network elements that satisfy the “necessary and impair” test. The Commission should make it clear that the plain language of the beginning of Section 251(d)(2) does not confer that authority on the Commission, but only allows the Commission to rely on other factors to add to the mandatory list. Any other reading of the “at a minimum” language would read the impairment test out of the Act, thus leaving carriers with no access to ILEC UNEs despite demonstrated impairment.

76/ See id. at para. 280.

251(d)(2) to allow the Commission to consider additional relevant factors that might justify requiring ILECs to provide a particular network element even in the absence of the appropriate “necessary and impair” findings.

The “at a minimum language” would permit the Commission to consider, for example: (1) the effect on the development of local competition of a network element’s unavailability, (2) the need to lower barriers to entry in the local exchange market, (3) the importance of mass market competition, (4) the importance of full-service competition, and (5) the practical difficulties of dealing with multiple vendors.

Of course, we believe that these factors can and should be considered as part of the “necessary” and “impair” analysis. We also believe that these factors already would be taken into account in our proposed wholesale market test. But should the Commission conclude otherwise, it can still consider these factors under the “at a minimum” language.

**VIII. FACTORS SUCH AS CARRIER IDENTITY, CUSTOMER IDENTITY, TYPE OF SERVICE, AND GEOGRAPHY ARE NOT RELEVANT UNDER THE “NECESSARY AND IMPAIR” TEST.**

Some ILECs have suggested, at least in some state proceedings, that it might be appropriate for them to use factors such as carrier identity, customer class, type of service, or geographic location to restrict access to network elements that otherwise would be available under Section 251(d)(2). 77/ Neither ILECs, this

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77/ Local Competition TSFT Process, New Jersey Board of Public Utilities Docket Nos. TX98010010, et al., Bell Atlantic-New Jersey Reply Comments (filed March 5, 1999), at 8-9; Investigation of Southwestern Bell Telephone Company’s

Commission, nor a state commission can lawfully use such factors to restrict access to network elements, either under Section 251(d)(2) or 251(c)(3).

Section 251(d)(2) requires the FCC to “determin[e] which network elements will be made available for purposes of subsection 251(c)(3).” This language in no way limits how, by whom, or where a UNE may be used. Section 251(c)(3), in turn, requires ILECs to provide network elements to “any requesting telecommunications carrier.” That section therefore imposes no limits on what carriers may use a network element. Section 251(c)(3) also requires access to network elements to be “nondiscriminatory.” Any restrictions on the carriers that may use a particular network element, or the class of customers to be served, or the type of service to be provided, would run afoul of the nondiscrimination requirement of Section 251(c)(3). Such restrictions are also flatly inconsistent with the Congressional objective to make available to *any* carrier the network elements, interconnection arrangements, collocation, and resale that are available to one carrier. This goal is embodied in the FCC’s interpretation of Section 251(i) of the Act (the “pick and choose” rule), which was expressly upheld by the Supreme Court in AT&T v. Iowa Utilities Board case. 78/

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Entry into the InterLATA Telecommunications Market, Texas Public Utility Commission, Project No. 16251, Southwestern Bell Telephone Company’s Response to Questions Regarding the Effect of the Supreme Court’s Decision in AT&T Corp. v. Iowa Utilities Board (filed Feb. 15, 1999), at 11; Proceeding on Motion of the Commission to Examine Methods by Which Competitive Local Exchange Carriers Can Obtain and Combine Unbundled Network Elements, et al., New York Public Service Commission, Case Nos. 98-C-0690, 95-C-0657, Comments of Bell Atlantic-New York (filed March 4, 1999), at 8-9.

78/ AT&T v. Iowa Utilities Board, 119 S.Ct. at 738.

Section 251(d)(2) also precludes restrictions on who can buy mandatory network elements and for what purpose. Section 251(d)(2)(b) requires ILECs to provide a network element to a requesting carrier “to provide the services that it seeks to offer.” The ILEC should not second guess a carrier’s stated need to use a network element to serve its customers. As noted above, CLECs’ needs for network elements will vary substantially depending upon many factors. The Commission cannot and should not attempt to write rules that would predict what those factors might be. Such an endeavor is neither possible nor lawful. The existence of a class-of-service limitation for service resale in Section 251(c)(4), but not in Section 251(c)(3), indicates that the Act does not permit class-of-service limitations on network elements. 79/ This view is bolstered by the Commission’s decision to read narrowly the Section 251(c)(4)(B) “class of customer” exception to unrestricted resale of ILEC services. 80/

The Commission also should not attempt to narrow the geographic availability of network elements based on assumptions about the ability of CLECs to obtain those network elements for themselves (for example, because other CLECs have already done so). 81/ Each carrier must make the determination whether the

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79/ As interpreted by the Commission, Section 251(c)(4)(B) permits an ILEC to restrict the availability of services for resale only under limited circumstances: e.g., the resale of residential class service to business customers, or resale of means-tested services to other customers. “All other cross-class selling restrictions are presumed unreasonable.” See Local Competition Order at ¶¶ 962, 963.

80/ Id. at ¶¶ 962-64.

81/ For example, Bell Atlantic-New York has limited availability of combined network elements in end offices in which there are already at least two collocators.

economics of serving a particular customer or customer base via competitive facilities can be justified. The Commission should resist attempts to craft UNE rules that might incorporate such arbitrary and unlawful restrictions.

**IX. THE “ESSENTIAL FACILITIES” ANTITRUST DOCTRINE IS NOT RELEVANT TO THE SECTION 251(D)(2) INQUIRY.**

The FCC has asked for comment on whether the antitrust “essential facilities doctrine” is relevant to the inquiry that the Commission must undertake under Section 251(d)(2). As explained below, substituting the “essential facilities” test for the “necessary” and “impair” standards would be contrary to the explicit language of the Section 251(d)(2), would violate the intent of Congress, and would improperly restrict the number and types of network elements that competitors have a right to access under the 1996 Act -- thus limiting local competition, contrary to the intent of Congress.

The essential facilities doctrine holds that if a monopolist is able to supply an input for itself in a manner that is superior to everything else that is available such that others cannot succeed unless they have access to it, that

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Petition of New York Telephone Company for Approval of its Statement of Generally Available Terms and Conditions pursuant to Section 252 of the Telecommunications Act of 1996 and Draft Filing of Petition for InterLATA Entry pursuant to Section 271 of the Telecommunications Act of 1996, Case No. 97-C-0271, Pre-Filing Statement of Bell Atlantic-New York (filed April 6, 1998), at 9 n.10.

monopolist should be required to supply that input to others under the antitrust laws. 82/

The essential facilities doctrine simply is not relevant to the network unbundling provisions of the 1996 Act. The network unbundling provisions are a central part of the local market-opening provisions of the Act. Congress recognized that without broad unbundling and mandated sharing of the economies of scale, scope, and connectivity of the incumbents' local network, local competition would not develop either quickly or broadly. Had Congress believed that antitrust laws would be sufficient to open up the local telecommunications market to competition, there would have been no need to pass the 1996 Act, much less to enact the network unbundling provisions.

The plain language of Section 251(d)(2), moreover, is very different from the standard used in essential facilities cases. Congress was specific both in its definition of "network element" -- which was very broad -- and in its enunciation of the standard the FCC should use in determining which network elements should be unbundled. 83/ There is nothing in the legislative history to suggest that

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82/ See 3A P. Areeda & H. Hovencamp, Antitrust Law ¶ 771a (1996). A "essential facilities" claim must satisfy five components: (1) the defendant is a monopolist; (2) the defendant's facility is essential to the plaintiff's ability to compete in a downstream market; (3) duplication of the facility by a competitor is infeasible; (4) the defendant denied the competitor use of the facility; and (5) it is feasible for the defendant to provide the plaintiff with access to the facility. See generally MCI Communications Corp. v. American Telephone & Telegraph Co., 708 F.2d 1081, 1132-33 (D.C. Cir. 1982), cert. denied, 464 U.S. 891 (1983) (combining the components into four elements).

83/ 47 U.S.C. §§ 153 (29), 251(c)(3), 251(d)(2).

Congress intended to incorporate that doctrine into the Act. If anything, the legislative history confirms Congressional interest in taking bold steps to break open the local market to competitors. 84/

The Supreme Court decision does not require the FCC even to consider the essential facilities doctrine in its analysis here. The Supreme Court's opinion contains but one mention of the doctrine, and that is only for purposes of illustrating what *the ILECs* have argued "necessary" and "impair" means. The Court did not endorse the standard, and recognized that other standards might properly be used under Section 251(d)(2). 85/

In sum, the Commission should interpret Section 251(d)(2) on its own terms, and in the context of the Act as a whole, without reference to antitrust doctrines that Congress did not intend to import into the Act.

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84/ See, e.g., S. CONF. REP. No. 104-458, at 1 (1996) (stating that the purpose of the 1996 Act is to provide for a new, "pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies to all Americans"); S. REP. NO. 104-23, at 5 (1995) (stating that the 1996 Act "requires telecommunications carriers with market power over telephone exchange or exchange access service to open and unbundle network features and functions to allow any customer or carrier to interconnect with the carrier's facilities"). Significantly, Section 601(b) of the 1996 Act, which cites the effect of the 1996 Act on the antitrust laws, makes no mention of any intent to incorporate or substitute portions of the antitrust laws for the Act's provisions. 47 U.S.C. § 153 note.

85/ See *AT&T v. Iowa Utilities Board*, 119 S.Ct. at 734 (stating that "it may be that some other standard would provide an equivalent or better criterion for the limitation upon network-element availability that the statute has in mind").

**X. THE AVAILABILITY OF *RETAIL SERVICES* DOES NOT REMOVE IMPAIRMENT WITH RESPECT TO *NETWORK ELEMENTS*.**

The Notice asks parties to comment on whether the availability of retail local exchange services should be relevant to an analysis of whether requesting carriers are impaired without access to ILEC network elements. 86/ The Commission correctly resolved this issue in the Local Competition Order. 87/ Nothing in the Supreme Court's decision requires that issue to be reconsidered. The Supreme Court simply asked the Commission to consider whether the availability of alternative sources of *network elements* is relevant to the "necessary and impair" test.

The availability of retail local exchange service is completely irrelevant to whether network elements -- the necessary inputs to provision of competitive local exchange services -- should be available from ILECs. Competitors do not use retail services to provide competing retail services unless they are engaging in service resale under Section 251(c)(4). Section 251(c)(3) would be entirely unnecessary if Congress believed that access to retail services for resale was all that competitors required. The market experience since 1996, moreover, shows that

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86/ Notice at ¶ 43.

87/ Local Competition Order at ¶ 287 ("[A]llowing ILECs to deny access to unbundled network elements on the grounds that an element is equivalent to a service available at resale would lead to impractical results, because incumbents could completely avoid section 251(c)(3)'s unbundling obligations by offering unbundled elements to end users as retail services.").

service resale does not provide a viable basis for local competition in any but the most limited circumstances. 88/

The Commission detailed in the Local Competition Order the many differences between service resale and the use of unbundled network elements. 89/ For example, unlike service resale, employing network elements allows competitors to distinguish the retail services they offer from those of the ILEC and to offer exchange access services. 90/ The Commission also squarely rejected the ILECs' arguments that access to resale of retail services meant that Congress did not intend to make all network elements available to requesting carriers. 91/ The Supreme Court expressly upheld the Commission's conclusion in rejecting ILEC challenges to the "all elements" rule. 92/

In sum, it is plain from the language and structure of the Act, from the findings in the Local Competition Order, and from the Supreme Court's decision, that resale cannot properly be considered an alternative to network elements under the Section 251(d)(2) "necessary and impair" standard..

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88/ See, e.g., Kim, Gary, "Batten the Hatches," Phone +, Dec. 1998, at 40.

89/ Local Competition Order at ¶¶ 328-341.

90/ Id. at ¶¶ 332-33.

91/ Id. at ¶¶ 329-31.

92/ AT&T v. Iowa Utilities Board, 119 S.Ct. at 736.

**XI. THE FCC SHOULD REINSTATE ITS RULE REQUIRING ILECS TO COMBINE ELEMENTS FOR THE REQUESTING CARRIER.**

The Commission's original Rule 51.315(c)-(f) required ILECs to combine network elements for a requesting carrier even if they are not ordinarily combined in the ILEC network, so long as such combination is technically feasible and would not impair others' access to network elements or interconnection. 93/ Rule 51.315(c)-(f) was vacated by the Eighth Circuit along with Rule 51.315(b).

Rule 315(c)-(f) should be reinstated because the Eighth Circuit's rationale for vacating the rule is no longer valid in light of the Supreme Court's decision in AT&T v. Iowa Utilities Board. 94/ The FCC has ample statutory

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93/ The Commission's rules provide that

[u]pon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements in any manner, even if those elements are not ordinarily combined in the incumbent LEC's network, provided that such combination is: (1) Technically feasible; and (2) Would not impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.

47 C.F.R. § 51.3159(c)(1) and (2); Local Competition Order, Appendix B, Rule 51.315(c)-(f).

94/ At least one state decisionmaker agrees with this view. Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks, Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks, Docket No. R93-04-003, I93-04-002, Proposed Decision of ALJ McKenzie: Interim Decision Setting Final Prices for Network Elements Offered by Pacific Bell (California Public Utilities Commission May 10, 1999), at 12-13.

authority to reinstate this rule pursuant to its Section 201(b) rulemaking authority. 47 U.S.C. § 201(b). 95/ The Supreme Court confirmed the expansive scope of the Commission's Section 201(b) authority, holding that the Commission's Section 201(b) power was broad enough to encompass the adoption of comprehensive local competition rules that are binding on state commissions. 96/

In vacating Rule 51.315(b)-(f), the Eighth Circuit decided that because the ILECs would rather allow CLECs to come in and combine elements for themselves, that the ILECs should have no obligation to combine elements for the CLECs. 97/ The parties sought judicial review of the court's vacation of Rule 51.315(b), and the Supreme Court reversed the Eighth Circuit, concluding that the court erred in its reading of the Act. The Supreme Court concluded that in the absence of Rule 315(b), "incumbents could impose wasteful costs on even those carriers who requested less than the whole network." 98/

Given the Supreme Court's decision, the Eighth Circuit's vacation of Rule 51.315(c)-(f) not longer rests on a correct reading of the 1996 Act. Whether or not the Eighth Circuit grants pending the motions to remand those rule sections to the FCC, the Commission should readopt the requirement embodied in those rules

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95/ The Commission's original rule was adopted pursuant to Section 251(d)(1) of the 1996 Act (47 U.S.C. § 251(d)(1)); Local Competition Order at ¶ 230.

96/ AT&T v. Iowa Utilities Board, 119 S.Ct. at 729-733.

97/ Iowa Utilities Board v. FCC, 120 F.3d 753, 813 (8th Cir. 1997), rev'd in part and aff'd in part, AT&T Corp. v. Iowa Utilities Board, 119 S.Ct. 721 (1999).

98/ AT&T v. Iowa Utilities Board, 119 S.Ct. at 737-38.

that the ILEC combine elements for the CLEC. Without such a requirement, the ILEC can act in a discriminatory manner, combining elements for itself but not for other carriers. <sup>99/</sup> Refusing to combine elements for CLECs would impose unnecessary and substantial costs on CLECs, costs that the ILEC itself does not have to bear, for no other reason than to deter their ability to use ILEC network elements in combination.

In addition, the Commission should make clear, in Rule 51.311, that ILECs are required to provide CLECs access to the same equipment and facilities that ILECs use themselves to combine network elements. (This proposed requirement is set forth in CompTel Proposed Rule 51.311(e).) If CLECs choose to combine themselves the network elements that are not already combined in the ILEC network (rather than asking the ILEC to do it), then CLECs must have access to the same equipment and facilities that the ILECs use in order to accomplish that combining. This requirement is mandated by the Section 251(c)(3) nondiscrimination provision and by the ILEC obligation, set forth in that section, to provide “unbundled network elements in a manner that allows requesting carriers to combine such elements . . . .” 47 U.S.C. § 251(c)(3).

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<sup>99/</sup> See AT&T v. Iowa Utilities Board, 119 S.Ct. at 738 (finding that Rule 51.315(b) finds its basis in the nondiscrimination requirements of Section 251(c)(3)).

**XII. THE COMMISSION'S ORIGINAL LIST OF NETWORK ELEMENTS, REVISED TO REFLECT ADVANCES IN TECHNOLOGY, SHOULD BE REAFFIRMED.**

Under the "necessary and impair" test discussed above, it is clear that each of the original network elements identified by the FCC in its 1996 Local Competition Order should still be mandatory. Requesting carriers would be impaired without access to each, because interchangeability has not been achieved for any, and there is no wholesale market for any of those elements (or the adequacy of self-supply). The Commission also should clarify and update its definitions to accord with developments in technology -- in particular, to reflect the development of broadband and packet network capabilities. The necessary modification to the original rules are reflected in the attached CompTel proposed rules, which Qwest fully endorses.

**A. The Presence of Five of the Seven Original Elements in Section 271 Shows Congressional Intent That at Least These Elements are Subject to Section 251(c)(3).**

The presence of five of the seven original network elements in the Section 271 competitive checklist is strong evidence that Congress assumed that at least these elements would be considered mandatory network elements. The remaining two -- operations support systems (OSS) and the network interface device (NID) -- also should clearly be mandatory. OSS is required by the Act's nondiscrimination provisions, so even if it were not a network element, it would be required. The NID is already a part of the standard loop offering now made by ILECs, and is a necessary part of the loop (although it can also be offered on an

unbundled basis). There is little doubt that a Commission decision to reinstate its initial list would be consistent with Congressional intent.

Some ILECs have suggested, in an attempt to circumvent the common sense reading of Section 271, that these five items are named specifically in Section 271 because Congress wanted to be sure that these elements continued to be available even if they were not considered mandatory network elements. Under this reading of Section 271, these elements would have to be made available, even though they would not be subject to cost-based pricing and nondiscrimination requirements ordinarily associated with network elements.

It is not possible, however, that Congress would have imposed an obligation to make network elements available when, according to this interpretation, requesting carriers would not be impaired without access to those elements. The more reasonable reading is that Congress wanted to be sure that at least these network elements would be a part of the competitive checklist, whatever else the FCC might mandate under Section 251(d)(2). It also is not credible that the items that are so fundamental to the development of local competition -- such as unbundled loops -- would be included in Section 271 on the assumption that the FCC might not classify them as required network elements. Such a reading of the competitive checklist would effectively write Section 251(c)(3) out of the Act.

**B. The UNE List Should Be Revised to Reflect Advances in Technology.**

The Commission correctly recognized in the Advanced Services Order that Section 251 of the Act applies equally to old and new network investment, to circuit-switched and packet-switched capability, to voice and data, and to conventional and advanced/broadband technologies. 100/ Congress made no distinction based on technology or service, and it did not declare that competitive access to ILEC networks would be frozen in time. 101/ Rather, the principles underlying the Act's local-market opening provisions apply just as forcefully to next generation technology as to conventional technology.

The Commission should take this opportunity to clarify that its network element definitions apply regardless of the capacity or capability of the network element. Access by competitors to advanced ILEC network capabilities is essential if they are to compete with the ILEC in the fast-developing market for high-speed, data intensive services and if they are to be able to take advantage of state of the art technology. There is absolutely no justification under the Act or as a matter of policy to exclude advanced capabilities from the list of mandatory elements. Of course, if the Commission concludes, on the basis of this record that

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100/ Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, et al., Memorandum Opinion and Order and Notice of Proposed Rulemaking, FCC 98-188, released August 7, 1998 ("Advanced Services Order") at ¶¶ 11, 35, 40, 49.

101/ See Advanced Services Order at ¶ 49 ("We reject BellSouth's argument that Congress intended that Section 251(c) not apply to new technology not deployed in 1996.").

there is a wholesale market for such network elements, then it need not place those elements on the list. But as Qwest demonstrates below, such advanced capabilities as xDSL-equipped loops and other broadband loops, high-speed transport, packet transport and switching, and dark fiber, should all be mandatory UNEs, as there is no wholesale market as yet for any of them.

### C. Mandatory Network Elements Under the Wholesale Market Test

#### 1. Loops

Without access to ILEC unbundled loops, CLECs would clearly be impaired in their ability to compete. Indeed, as the Local Competition Order notes, Congress, in the Joint Explanatory Statement of the Committee on Conference, identified local loops as a network element that incumbent LECs would be required to make available to competitors. 102/ Specifically, the Committee on Conference stated that

[t]he term “network element” was included to describe the facilities, *such as local loops, . . . that a local exchange carrier must provide* for certain purposes under other sections of the conference agreement. 103/

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102/ Local Competition Order, 11 FCC Rcd at 15689, ¶ 377.

103/ H.R. Conf. Rep. No. 458, 104th Cong., 2d Sess. 116 (1996) (“Joint Explanatory Statement”) (emphasis added).

Congress also identified loops as a mandatory ILEC UNE in Section 271 of the 1996 Act. **104/**

The ILEC's ubiquitous local network means that CLECs can reach any customer through the ILEC facilities, without incurring the often substantial expense of building duplicate loops to each customer they would like to serve. The economies of scale and scope of the incumbent LEC network also mean that it is often far more efficient for CLECs to employ ILEC loops than it would be to build those loops themselves. The high individual and social costs of constructing duplicate loops, including costs associated with digging up the streets and customers' yards, also can be avoided by using the ILEC's loops.

The Commission found in the Local Competition Order that without access to ILEC loops, new entrants would need to invest in and build duplicative facilities, which, in turn, would "likely delay market entry and postpone the benefits of local telephone competition for consumers." **105/** The Commission also found that without access to ILEC loops, competitors would face increased risks of entry and increased costs of capital because of the need to "make a large initial sunk investment in loop facilities before they had a customer base large enough to justify such an expenditure." **106/**

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**104/** 47 U.S.C. § 271(c)(2)(B)(iv); see also Local Competition Order, 11 FCC Rcd at 15690, ¶ 377.

**105/** Local Competition Order, 11 FCC Rcd at 15690, ¶ 378 (footnotes omitted).

**106/** Id., 11 FCC Rcd at 15690, ¶ 378 (footnotes omitted).

By contrast, the Commission found that the ability to lease ILEC loops not only “allows the new entrant to build facilities gradually, and to deploy loops for its customers where it is efficient to do so,” but also allows competitors to use ILEC loops in areas where they constitute the most efficient means of providing competing service. 107/ For these reasons, the Commission concluded that

preventing access to unbundled loops would either discourage a potential competitor from entering the market in that area, thereby denying those consumers the benefits of competition, or cause the competitor to construct unnecessarily duplicative facilities, thereby misallocating societal resources. 108/

These findings are correct. Requiring competitors to build duplicative local loops would delay market entry, increase the risk of entry, increase the costs of capital for competitors, and make inefficient use of societal resources.

Few would disagree with these general observations. It is essential that the Commission recognize that these principles apply to all ILEC loops, including high speed loops, loops in geographically concentrated areas, and loops in areas where CLECs have constructed loops. The availability of loops should not be restricted based on any of these considerations.

It also is essential for the Commission to make clear that the definition of unbundled loop includes all types of loops, including broadband loops (such as DS1, DS3, OC3, OC-n, PRI, and xDSL-equipped loops). The CompTel proposed

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107/ Id. (footnotes omitted).

108/ Id. (footnotes omitted).

rules revise the Commission's original definition to make this clear. 109/ The CompTel rule also defines loop in terms of functionality and capabilities, which more closely parallels the statutory conception of network elements. 110/ Finally, the CompTel definition allows the requesting carrier to designate the beginning and ending point of the loop, rather than allowing the ILEC to do so based on the architecture it has chosen. 111/

The fact that some CLECs may be installing digital subscriber line access multiplexers (DSLAMs) does not mean that other CLECs do not need access to the DSL-equipped loops offered by ILECs. 112/ Just because the ILEC has installed electronics on a loop to increase the loop's capacity or capability does not change the fact that the facility is still a loop (and subject to the same economic considerations discussed above as any other loop). The ILECs should not be

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109/ See CompTel Proposed Rule § 51.319(a) (loop is defined as "the transmission capability (regardless of the transmission media used) . . ."). The FCC's original definition of an unbundled loop defined it in terms of a "transmission facility," so it clearly included the transmission capability of a loop, but because it was defined in terms of a particular technology and hardware (the main distribution frame), it was not sufficiently supple to adapt to evolutionary loop technology nor to encompass all types of loops. See former rule 51.319(a).

110/ See CompTel Proposed Rule § 51.319(a)(1). See also 47 U.S.C. § 153(29) ("network element" includes the "features, functions, and capabilities that are provided by means of such facility or equipment . . .").

111/ See CompTel Proposed Rule § 51.319(a).

112/ In the proposed rules, DSLAMs are made available either as part of the loop (and xDSL-equipped loop) or as part of packet transport. This takes into account the fact that the DSLAM is most useful when included with other components that maximize its usefulness to entrants and to promoting advanced services competition.

permitted to force requesting carriers to purchase and collocate equipment of their own in order to be able to provide advanced services to their customers.

Competitively provided xDSL loops are not yet “interchangeable” with ILEC-provided xDSL-equipped loops. Nor is there a wholesale market yet for these loops, given the lack of interchangeability. This is not to say that the current impairments to the development of a wholesale market for xDSL-equipped loops (and possibly other broadband loops) could not be eliminated. Indeed, there may be CLECs that are interested in being wholesale providers of that network element. Some of the operational reforms that would be required before interchangeability is possible include full implementation of the Commission’s recently adopted collocation reforms; electronic access to databases with information on the availability of conditioned loops; and other OSS that can make the provisioning of a competitively supplied xDSL-equipped loop as seamless as the ILEC xDSL loop.

The increasing deployment of digital loop carrier technology by ILECs may mean, however, that ILEC xDSL-equipped loops must remain available when a customer is served by DLC technology, because greater obstacles exist to competitive provision of xDSL-equipped loops in that circumstance. For example, CLECs may need to collocate in the remote terminal, which may be more costly than collocating in the central office. There may also be space limitations in that circumstance as well.

Regardless of future developments in this area, it is plain that today there is no wholesale market for the xDSL-equipped loop element (or for any other

loop). The ILECs own arguments reveal the extent of the economies they enjoy by integrating xDSL into their own networks -- something that CLECs by definition cannot do as long as they must rely on access to the underlying ILEC unbundled copper loop. For example, US West has acknowledged that volume is required to make deployment of xDSL technology justifiable, particularly in less densely populated areas. US West argued in its Section 706 petition that because it serves many less densely populated areas, and thus has lower volumes of customers per switch, it needs special incentives to invest in xDSL technology to serve those customers. 113/ As US West stated in its FCC petition:

[D]eploying xDSL to a central office requires enormous capital investments: US West must install one or more DSLAMs in each central office, prepare the loops of each MegaBit Service subscriber, and cable the office to a network of ATM switching systems. 114/

US West also observed that

The central office equipment used to provide MegaBit service is expensive: a basic, 128-user DSLAM costs approximately \$73,000 installed (and several might be necessary), an installed ATM switching system costs approximately \$350,000, and the DS-3 networking needed to connect the central office with other central offices can cost several hundred thousand dollars. . . . 115/

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113/ Petition of US West Communications, Inc. for Relief from Barriers to Deployment of Advanced Telecommunications Services, FCC Docket No. 98-26 (filed February 25, 1998), at 25-26 (“US West Petition”).

114/ Id. 35.

115/ Id. at 31-32.

US West also correctly identifies residential and small business customers as the most vulnerable to being left out because of the relatively higher cost of serving them. 116/ US West believes it is hard to justify investing in adding xDSL for each central office serving area, even though it does not need to collocate and is not restricted in the use of collocated switching equipment, has an interoffice transport network already in place, and has the entire local customer base over which to spread the cost of that technology. One need only imagine how difficult it would be for each of US West's competitors to justify that investment.

Similarly, Bell Atlantic has argued that

The proposed rules would require incumbents to segregate advanced services electronics from their networks, and to create a new business enterprise from scratch to provide services using them -- services they provide today on an integrated basis with voice services. This would increase the cost of providing advanced services . . . . In the case of ADSL, these cost increases would be so substantial that they would make the service unaffordable for many Americans. 117/

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116/ Id. at 26.

117/ Deployment of Wireline Service Offering Telecommunications Capability, CC Docket No. 98-147, Bell Atlantic Reply Comments (filed Oct. 16, 1998), at 24, 25 (footnotes and citations omitted). Bell Atlantic quantified the added costs of providing DSL through a separate affiliate:

Today, for example, the Bell Atlantic telephone companies have begun to offer an ADSL service that is over 1,000% faster than 56 Kbps modems at a rate of \$39.95 per month. If this service were to be offered through a separate data affiliate, Bell Atlantic's costs would increase by approximately \$40 per month per subscriber. This cost increase would require a doubling of the tariff rate from \$39.95 to \$80. The increase in price would, in turn,

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Indeed, according to Bell Atlantic, the costs associated with an inability to use integrated ILEC advanced service facilities would

actually encourage[ ] incumbent carriers not to offer advanced services to the mass market at all. Only the lucrative larger business data market might be able to sustain an advanced services affiliate. 118/

The same is true for competitive carriers in their efforts to provide advanced services in competition with ILECs. The ILECs do not suffer the disadvantages of two separate networks, which any CLEC must suffer if it attempts to integrate its own DSL facilities with those of the ILEC.

Access to xDSL-equipped loops as a network element is therefore essential until the impairments to installing competitive DSL equipment are eliminated and a wholesale market for DSL-equipped loops has developed. The same holds true for access to other high-speed loops -- such as DS1, DS3, OC-3, and OC-n. These last-mile high-speed facilities are essential for carriers like Qwest, who have invested billions of dollars in their own high-speed intercity networks, only to be stopped cold at the local network.

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reduce anticipated residential demand for ADSL service in the Bell Atlantic by as much as 80% over the next five years and hobble ADSL as a meaningful competitor to cable modems and other advanced services.”

Id.

118/ Id. at 26.

## 2. Network Interface Device

The Commission explained the need for access to the network interface device (“NID”) in the Local Competition Order:

[a] competitor must be able to connect its loops to customers’ inside wiring in order to provide competing service, especially in multi-tenant buildings. In many cases, inside wiring is connected to the incumbent LEC’s loop plant at the NID. In order to provide service, a competitor must have access to this facility. 119/

The ILEC NID provides the only practical means of obtaining access to a customer’s inside wiring. The need for access to the NID, and thus to a customer’s inside wiring, is therefore critical whether a competitor is providing service using loops leased from the ILEC or using self-provisioned loops. Moreover, for all the reasons that competitors would be impaired without access to the loop network element, they would be impaired without access to the NID.

CompTel’s proposed rules correctly require the ILEC to provide access to the NID as part of the loop network element. 120/ Such access is particularly appropriate because the NID is generally provisioned today by ILECs as part of the local loop.

An inability to obtain access to the ILEC NID would, in the vast majority of cases, prevent a competitor from obtaining access to its customers’ inside wiring. As a result, a lack of access to the ILEC NID clearly would impair a

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119/ Local Competition Order, 11 FCC Rcd at 15697, ¶ 392.

120/ See CompTel Proposed Rule § 51.319(a)(3).

competitor's ability to provide service. The Commission should thus require ILECs to provide access to the NID both as part of the loop UNE and as a separate network element.

### **3. Unbundled Local Switching**

#### **a. Circuit Switching**

The Commission should make clear that all forms of switching -- local circuit, packet, and tandem -- are mandatory network elements. The CompTel proposed rule adds packet switching to the definition of switching, but otherwise leaves the original definition in Rule 319 the same.

Unbundled local switching is the key to provision of competing local exchange service on a ubiquitous basis and across a broad spectrum of customers. Congress' recognition of this fact is reflected in the Conference Committee's Joint Explanatory Statement. Like local loops, the Joint Explanatory Statement expressly lists local switching as an example of the network elements that incumbent LECs would be required to make available to competitors. According to the Joint Explanatory Statement,

[t]he term 'network element' was included to describe the . . . equipment, *such as switching*, . . . *that a local exchange carrier must provide* for certain purposes under other sections of the conference agreement. 121/

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121/ Joint Explanatory Statement at 116.

Congress also recognized the importance of access to unbundled local switching by including it as a mandatory UNE in Section 271. 122/ Several state commissions, moreover, have recognized the need for access to the local switching UNE in ordering ILECs to provide access to combinations of all elements (even in the face of the Eighth Circuit's decision to the contrary). 123/ Since the Supreme Court decision, at least one state commission has already recognized that unbundled local switching should be a mandatory network element, without limitations, because requesting carriers are clearly impaired without it. 124/

Qwest needs access to unbundled local switching in order to provide local exchange service to its existing long distance customer base. Even for those customers that, due to size or geography, could economically be served without

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122/ 47 U.S.C. § 271(c)(2)(B)(vi).

123/ Petitions for Approval of Agreements and Arbitration of Unresolved Issues Arising Under Section 252 of the Telecommunications Act of 1996, Case No. 8731, Phase II(c), Order No. 74671 (Maryland Public Service Commission Nov. 2, 1998), at 21; Investigation and Suspension of Tariff Sheets Filed by US West Communications, Inc. with Advice Letter No. 2617, Regarding Tariffs for Interconnection, Local Termination, Unbundling and Resale of Service, Docket No. 96S-331T, Commission Order on Reconsideration, Rehearing, and Reargument (Colorado Public Utilities Commission Dec. 9, 1998), at 16, 23; Investigation Regarding Compliance of the Statement of Generally Available Terms of BellSouth Telecommunications, Inc. with Section 251 and Section 252(d) of the Telecommunications Act of 1996, Case No. 98-348, Order on Reconsideration at 4 and Order at 9 (Kentucky Public Service Commission Oct. 5, 1998).

124/ Petition by AT&T Communications of the South Central State, Inc. for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GE South Incorporated Concerning Interconnection and Resale under the Telecommunicaitons Act of 1996, Case No. 96-478, Order (Kentucky Public Service Commission May 13, 1999), at 2, 4.

using ILEC switching, there will be instances where those customers require services that can only be provided via lease of the ILEC switch -- for example, in the case of multi-location business customers, or in the case of a primarily data customer that also wants to buy local exchange service. The ILECs, it should go without saying, will be able to offer their customers any package of services; the CLECs must be able to offer that same complement of services in order to compete effectively.

Access to unbundled local switching to serve all classes and sizes of customers is also critical. Many CLECs will enter the market first by serving the most high volume business customers and then extending its offerings to the lower end of the market. The costs of becoming a local telephone company, even when the ILECs network elements are the facilities being used, are substantial. These costs need to be spread out over as large a customer base as possible to justify entry.

The existence of CLEC-owned local switches does not change the fact that CLECs are impaired without access to ILEC switching. Unlike the ILEC switch, the CLEC switch is not already attached to the ILEC loop. As a consequence, a competitor seeking to use an ILEC unbundled loop with a competitively supplied switch (either its own or that of another CLEC) will incur added costs, operational difficulties, and delays.

The Commission discussed these problems and the consequent need for access to the local switching UNE in the Local Competition Order. For example, the Commission noted that “[i]n the United States, there are over 23,000 central

office switches, the vast majority of which are operated by incumbent LECs.” 125/

The Commission thus concluded that consumers would be unlikely to

receive the benefits of competition quickly if new entrants were required to replicate even a small percentage of incumbent LECs’ existing switches prior to entering the market. 126/

The Commission also noted evidence from the Illinois Commerce Commission staff that “it takes between nine months and two years for a carrier to purchase and install a switch.” 127/ Based on this evidence, the Commission concluded that lack of access to unbundled switching from the ILEC would create a barrier to entry. 128/ By contrast, the Commission found that the ability to purchase unbundled switching would “promote competition in an area until the new entrant has built up a sufficient customer base to justify investing in its own switch.” 129/

The added problems of purchasing and installing a switch may be worth it in the case of some customers, but in many cases they cannot be justified. That is a major reason why mass market competition has not yet taken place and why CLECs still need access to ILEC switching, regardless of their business plans or facilities ownership.

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125/ Local Competition Order, 11 FCC Rcd at 15705-06, ¶ 411.

126/ Id.

127/ Id.

128/ Id.

129/ Id.

Until interchangeability of CLEC and ILEC switching is possible, then, there cannot be a wholesale market in unbundled local switching. Indeed, Qwest is not aware of any CLEC today that is selling unbundled local switching, despite the existence of numerous CLEC switches. While CLECs will continue to install their own switches, it remains the case that CLECs are impaired if they must rely on their own or other CLEC switches, given the integration of ILEC switching with ILEC loops and the lack of operational mechanisms that could enable CLEC switching to substitute seamlessly for ILEC switching.

This is not to say that interchangeability is never going to be possible for the switching element. Operational mechanisms to make these elements interchangeable operationally could be developed. Electronic cross-connect systems could be developed that would convert the current manual process for disconnecting and reconnecting ILEC loops to CLEC facilities to a software-based system (comparable to the system used to change customers using ILEC switches). In fact, as digital loop carrier technology becomes more widespread, electronic cross connect capability will be too, since that is how cross-connects are accomplished using DLC technology.

Until such reforms are made, however, competitively supplied switching is not an adequate substitute for ILEC switching, and requesting carriers will be impaired without such access.

**b. Packet Switching.**