

side of the network to include cross-connect, cable, and multiplexing equipment or to otherwise create flexibility in the physical point where the loop terminates.¹⁸² All these suggested definitions seek to account for the real-world difficulties that CLECs have encountered over the past three years in dealing with incumbent LEC loop facilities. Hence, as MCI WorldCom (at 44) notes, it is crucial that the Commission properly define the loop and recognize that “[a] loop is no longer only end to end copper from the customer premises to the incumbent LEC end office.”¹⁸³

Based on its review of the comments and its own experience in attempting to use unbundled loops, AT&T believes that the Commission should clarify that incumbent LECs should

(. . . continued)

Commission should designate the minimum point of entry (‘MPOE’) as the demarcation point in all commercial and residential MTEs”) (emphasis omitted); WinStar at 10 (same); *id.* at 7 (“wiring, terminal blocks, and other facilities owned and/or controlled by ILECs within MTEs are network elements, regardless of which side of the demarcation point they happen to fall”); *id.* at 8 (“the Commission must also clarify that ILECs must provide competitive access to in-building conduits and pathways”); AT&T at 84-85 (the loop should include incumbent LEC riser cable); MCI WorldCom at 45 (“The ‘customer demarcation point’ is that physical or logical point at which the customer’s network or wiring, and the ILEC’s network meet, which may be at the network interface device, or may be at some point between the ‘intrabuilding network cable’ and the customer-maintained and owned wiring”).

¹⁸² See, e.g., CPI at 15-16 (including cross-connect and cabling equipment); *id.* at 17 (loop should “include all its potential functionality, including multiplexing, coding, modulation, and loss and gain insertion”); CompTel at 32 (CLECs should be able to “designate the termination point of a loop as any technically feasible termination (not just the main distribution frame)”); Qwest at 62-63 (same); MGC at 20 (Commission must clarify its definition “to resolve disputes between ILECs and CLECs over the use of ILEC-owned cabling at the customer premises”); AT&T at 85 (“The Commission should clarify that the definition of the local loop includes multiplexing equipment regardless of where the equipment is attached to the loop”); MCI WorldCom at 45 (“The ‘loop access point’ is the point at which the loop is connected to other network elements”).

¹⁸³ The definitions in the original Rule 319 were well suited to standard two-wire, voice-grade analog service. However, other service configurations are possible, and the Commission’s definitions of the unbundled loop and NID should encompass these possibilities as well.

unbundle loops in accordance with the following three principles. First, the Commission must ensure that CLECs have access to all the incumbent's equipment and facilities up to the privately owned wiring at a customer premise. These facilities would include terminating equipment, such as smart jacks, channel banks, and any other cross-connection functionality, including all necessary test loop back and electrical protection owned or controlled by the incumbent LEC which can reasonably be construed to represent NID functionality.¹⁸⁴ As Level 3 (at 20) notes, these equipment and facilities form the "last one hundred feet" of the loop. Access to them is essential if loop unbundling is to have any meaning. If a CLEC cannot obtain access all the way to the privately owned wires serving a customer, it often simply cannot provide service.

¹⁸⁴ The Commission could apply this principle in part by defining the NID as follows:

the functionality that provides the physical termination (including electrical protection such as grounding) and cross-connection, at the appropriate signal throughput (or bandwidth) of the ILEC facilities and the privately owned wiring at a customer's premises.

In all events, the Commission must ensure that CLECs have access to the NID either as an unbundled network element or as a part of the loop. As Qwest (at 67) notes, "[a]n 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." *See also* AT&T at 83-84; Allegiance at 17; ALTS at 48-49; C&W at 34-35; CPI at 17; CompTel at 35-37; CoreComm at 31-32; e.spire at 23-24; KMC at 18; Level 3 at 17; MCI WorldCom at 47-48; MGC at 20; Qwest at 67-68; RCN at 6. Further, if the NID were unavailable, incumbent LECs could impose massive and prohibitive costs on CLECs by disconnecting the NID from the loop each time a customer switched carriers, creating service outages and requiring CLECs to undergo the labor-intensive task of traveling to each new customer's residence. GTE's assertion that it is not "likely" to engage in this tactic, *see* GTE at 57 n.36, provides little comfort, in light of its willingness to disconnect loops from switches while the Eighth Circuit's invalidation of Rule 315(b) was in effect and the careful hedging on this point in its Comments.

For example, CLECs' ability to serve high-volume customers through unbundled loops at the DS1 level and above is impaired by the fact that incumbents often provide only the "raw loop facility," without the terminating equipment necessary to interconnect the CLEC's network with the wires serving the customer. This makes such loops practically unavailable. For example, an incumbent LEC may not provide, as part of the unbundled loop and NID, channel banks or other equipment that are necessary to connect the loop to the customer's facilities; similarly, it may not provide access to the space in the building where this type of equipment was previously used by the incumbent. If CLECs cannot obtain access to such terminating and cross-connection equipment in the incumbent LEC's equipment space, they must acquire and place all such facilities in the building themselves – which places CLECs back in the same bind with respect to building access that they face with a full facilities build-out. As a result, AT&T has been often forced to acquire access to high capacity incumbent LEC facilities (at the DS1 level and above) through the incumbent LECs' interstate access tariffs, rather than the UNE-Loop and NID, because that is the only way it can use the loop facilities and associated terminating and cross-connection equipment at the customer premises to serve its customers.¹⁸⁵

Second, the Commission should reiterate that the definition of the loop does not hinge on the type of loop media or the type of service that incumbent LECs carry over the loop. Fiber,

¹⁸⁵ See Lynch Aff. ¶¶ 9,11. Equally important, although incumbent LECs' own OSS systems can identify the level at which any particular loop can support service (such as DS1, etc.), no incumbent LEC has developed an OSS interface that would allow a CLEC to determine that same information. This lack of information also forces CLECs to use special access in cases where a particular level of service is guaranteed.

coaxial cable, copper pairs, or mixed technology loops all must be unbundled. This clarification will inhibit the ability of incumbent LECs to “hide” loops through the use of a DLC configuration, as the Commission found was a possibility – and impermissible – in the *First Report and Order* (§ 383). This clarification will further ensure that CLECs can use unbundled loops to provide advanced services wherever technically feasible.¹⁸⁶

Third, the Commission should clarify that the loop does not necessarily terminate at the MDF in the incumbent LEC’s central office, but, at the CLEC’s option, at the physical termination and cross-connection to *either* (i) any other incumbent LEC unbundled network element located in the incumbent LEC central office or (ii) any technically feasible point of interconnection with the CLEC network where the CLEC gains access to communications that its customer places on that loop.¹⁸⁷ Such clarification of the loop definition “will facilitate the combination of the loop with other elements – such as switching capabilities – in the most economical manner, and without the necessity of a collocation arrangement in each end office.”¹⁸⁸

¹⁸⁶ See *infra* at 144-57. The Commission also must ensure that adequate, nondiscriminatory spectrum management rules are implemented by incumbent LECs to ensure that CLECs can provide advanced services such as ADSL over unbundled loops.

¹⁸⁷ The Commission could apply these loop definition principles in part by defining the loop as follows:

the transmission capability, including underlying media (fiber, coaxial cables, copper pairs), intervening electronics and test access necessary to provide the designated signal throughput between the NID at the customer’s premises and the physical termination and cross-connection to either another ILEC unbundled network element located in the incumbent LEC central office or any other technically feasible point of interconnection with the CLEC network where the CLEC gains access to communications that its customer places on that loop.

¹⁸⁸ CompTel at 33.

These principles would go a long way toward addressing many of the problems that CLECs have encountered in using unbundled loops. For example, they will ensure that unbundled loops exist as a viable alternative to counteract the building access problems that AT&T and other CLECs have found so daunting around the country. In particular, because a CLEC could then initiate service by relying on unbundled loops without first having reached an agreement with a landlord, the latter's ability to exercise monopoly power over building access space will be reduced substantially. Not only will these clarifications reduce the costs associated with providing local services to high volume customers, they will substantially lessen the ongoing delays CLECs otherwise encounter when attempting to initiate service to new customers or to expand the range of services they offer to existing customers. At the same time, these clarifications would have no adverse effect on a typical residential POTS loop, which would still extend between a standard NID and the CLEC's collocation or the unbundled switching element in the incumbent LEC's wire center.

Further, as AT&T and other commenters demonstrated in the Commission's Advanced Telecommunications Services proceeding, and ALTS (at ii) reaffirms in this proceeding, incumbent LECs should be required to provide loop characteristic information to CLECs through their OSS that allows CLECs to determine whether or not a loop can support the services a CLEC wishes to provide a particular customer.¹⁸⁹ Without loop characteristic information,

¹⁸⁹ See *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, Comments of AT&T Corp., pp. 54-57 (filed Sept. 25, 1998); *id.*, Reply Comments of AT&T Corp., pp. 59-67 (filed Oct. 16, 1998).

CLECs cannot identify the appropriate loops for providing the services to which its potential customers wish to subscribe. Such an informational deficiency and discrimination undermines the CLEC's ability to interact with potential customers and, at a minimum, retards the speed with which the CLEC can initiate service compared to the incumbent LEC.

B. Local Switching

The comments of CLECs and state commissions provide compelling evidence that CLECs must have access to unbundled local switching if they are to offer broad-based local competition.¹⁹⁰ In particular, the comments confirm that unbundled switching is needed to overcome two broad and significant barriers to mass-market entry.

First, CLECs would incur substantial cost disadvantages and delays from having to deploy a network of switches and then extend unbundled loops from an incumbent LEC's end office to those switches – disadvantages that even an incumbent LEC's consultant found would make it unprofitable for CLECs to pursue 70 percent of the residential market.¹⁹¹ *Second*, CLECs would incur delays and service-quality disadvantages from having to rely upon the manual process of coordinated hot-cuts to connect unbundled loops to their switches. These cost disadvantages, delays, and service-quality problems are significant impairments that incumbent

¹⁹⁰ *E.g.*, AT&T at 86-108; MCI/WorldCom at 51-58; Sprint at 28-31; CompTel at 37-38; GSA at 5; Qwest at 68-73; TRA at 34-38; Excel at 2-3; Net2000 at 13-14; RCN at 16; KMC at 15-16; Cal. PUC at 4-5, Illinois CC at 11-14; Texas PUC at 14; Iowa Utils. Bd. at 6-10; Kentucky PSC at 2.

¹⁹¹ AT&T at 95; *see, e.g.*, AT&T at 93-100; CompTel at 39; MCI/WorldCom at 51 & Bryant Decl. ¶¶ 14-15; Sprint Comments, App. D p.2; Qwest at 70-71; CPI at 21; Cal. PUC at 4-5; Texas PUC at 14.

LECs do not face.¹⁹² They not only limit the ability of CLECs to serve the narrow market segments for which they now compete, but serve ultimately to preclude CLECs from providing the additional mass-market services they seek to offer. These extraordinary impairments can be overcome only with access to unbundled switching in combination with other unbundled network elements.¹⁹³

Nevertheless, the incumbent LECs and USTA contend that CLECs do not need unbundled switching at all.¹⁹⁴ Their flawed analysis reflects their failure to apply the proper statutory standard. Thus, the incumbent LECs frame the inquiry as whether CLECs would “have a meaningful opportunity to compete” using their own switches,¹⁹⁵ a test they assert is satisfied by the deployment of a single CLEC switch in a given area.¹⁹⁶

¹⁹² The relevant standard is the “impair” rather than the “necessary” standard. Although the incumbent LECs advocate expansive definitions of the term “proprietary,” the only aspect of switching (apart from the routing tables, discussed in Part IV.D, *infra*) that is alleged to be proprietary are line class codes. SBC at 12. The allegation is absurd. Every switch comes with some number of line class codes, which are available to be assigned both to the incumbent LEC and to the CLECs. CLECs need access to codes that the incumbent is not using so that they can offer services (such as blocking of 900 or international calls) in parity with the incumbent.

¹⁹³ *E.g.*, AT&T at 100-08; CompTel at 40-41; MCI WorldCom at 52 & Bryant Decl. ¶¶ 16-17; Sprint at 30 & App. D, Qwest at 70.

¹⁹⁴ Ameritech at 69-84; Bell Atlantic at 20-26; BellSouth at 55-62; SBC at 33-42; U S WEST at 42-46; USTA at 34 & *Huber Submission* I-1 to I-35; Cincinnati Bell at 6. Only one state commission (Ohio PUC at 7-9) and one CLEC (Focal at 4-6) join the incumbent LECs in advocating limited unbundling of the switch; their views reflect the same analysis presented by the incumbent LECs, and should be rejected for the same reasons.

¹⁹⁵ SBC at 35; *see* Ameritech at 72; BellSouth at 60; *cf.* Bell Atlantic at 22 (test is whether CLECs “are capable of providing their own switching”).

¹⁹⁶ *See* Ameritech at 84; SBC at 42; Bell Atlantic at 26; U S WEST at 46; BellSouth at 62.

Under Section 251(d)(2)(B), however, the issue is whether “the failure to provide access” to unbundled switching would diminish “the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.”¹⁹⁷ Section 251(d)(2)(B) requires consideration not simply of whether denial of access to unbundled switching would impair a CLEC’s ability to serve the high-volume, niche business market that it is already serving, but whether it would impair its ability to provide “the services” – including service to the mass market – “that it *seeks to offer*.”¹⁹⁸ The statute thus requires the Commission to determine whether a denial of access to unbundled switching would impair a CLEC’s ability to provide the services it seeks to offer as compared to that CLEC’s ability to provide those same services if it were granted access to unbundled switching – a comparison that incumbent LECs never address.

By framing the question incorrectly, the incumbent LECs arbitrarily exclude from consideration the many ways in which the denial of access to unbundled switching impairs a CLEC’s ability to provide the services it seeks to offer. For example, although the cost disadvantages of extending loops to a remote switch and of not having scope-and-scale economies may not preclude a CLEC from deploying a single switch to serve certain high-volume business customers in some areas, they do insurmountably impair competition for smaller business and residential customers. Similarly, although delays in switch deployment may not preclude market entry altogether, they nevertheless seriously impair the CLECs’ ability to pursue mass-

¹⁹⁷ 47 U.S.C. § 251(d)(2)(B).

¹⁹⁸ *Id.* (emphasis added).

market entry as rapidly and effectively as they could if they were permitted access to unbundled switching. Likewise, although manual processing of coordinated hot cuts should be able adequately to support sufficient volumes of orders for CLECs that have deployed their own switches, exclusive reliance upon such processing would not only impair but preclude CLECs from attempting mass-market entry.

The incumbent LECs' arguments are thus inadequate because they exclude, by design, the very reasons why CLECs so starkly need access to unbundled switching. In the real world, switch-based service is economical today principally for large business customers, and competition is only beginning to emerge within this niche. No CLEC is combining its own switches with unbundled loops to compete broadly for all (or most) residential and business customers in any area; indeed, no CLEC has even announced plans to do so. By ignoring the economic and practical context in which CLECs provide service, the incumbent LECs simply disregard – rather than disprove – the core reasons why access to unbundled switching is so vital to the future of local competition.

1. The Incumbent LECs Do Not Rebut The Evidence That The Higher Cost Of Extending Unbundled Loops To A CLEC's Own Switch Would Significantly Impair The CLECs' Ability To Offer Local Service, Especially To The Mass Market.

As AT&T (at 93-100) shows, CLECs incur substantial costs to extend loops to their own remotely deployed switches. These costs include the non-recurring charges assessed by incumbent LECs for coordinated hot cuts, the CLECs' own internal costs to monitor the hot cut process, and the capital costs to establish collocation space, to purchase equipment such as digital loop carriers and multiplexers, and to deploy or lease dedicated transport from collocated space to

the CLEC switch. Virtually none of these costs would be incurred either by CLECs with access to unbundled switching or by incumbent LECs.

Nonetheless, the incumbent LECs propose that the Commission deny CLECs access to unbundled switching in any area “that is already being served by at least one CLEC voice switch,”¹⁹⁹ because if even just “one CLEC” has deployed a switch that could be used for local voice service, that fact demonstrates that “other CLECs could self-provision switching in the same area.”²⁰⁰ Others argue that unbundled switching is not needed at all.²⁰¹ In support of these views, the incumbent LECs claim that many local CLEC switches have already been deployed, that the “reach” of each switch extends to a wide geographic area, that additional switches “can

¹⁹⁹ Ameritech at 84. The size of the relevant area varies, depending on the commenter. *See, e.g.*, SBC at 42 (“no [switch] unbundling where a rate exchange area is already served by one CLEC switch”); Bell Atlantic at 26 (no switch unbundling “in any area that is now served by competing carriers with their own switch”); *cf.* U S WEST at 46 (no unbundled switching to “an ILEC switch that is within 50 miles of at least one CLEC circuit switch (or packet switch providing voice services)”; BellSouth at 62 (no unbundled switching in certain “Zones,” in which CLECs have allegedly “demonstrated that they can successfully deploy switches and self-provision switching services”).

²⁰⁰ U S WEST at 44.

²⁰¹ GTE applies a test that purports to examine whether CLECs “can compete effectively” using alternatives to incumbent LEC switching. GTE at 48-49. Under this test, GTE concludes that access to unbundled switching should be denied throughout the nation. *Id.*; *cf.* Ameritech at 84 (denying access so long as “collocation is available in an ILEC central office”); Bell Atlantic at 26 (no switch unbundling “in any area that a competitor *could* serve with its own switch”) (emphasis added). There is effectively little difference in result between the incumbent LECs’ various tests: because each ignores the most significant CLEC impairments and overstates CLECs’ ability to “serve” customers with their own switching, none would permit access to unbundled switching on a broad scale.

be deployed very quickly” and would be “inexpensive,”²⁰² and that a CLEC could rely on the switches of other CLECs and of wireless carriers to provide service.²⁰³

These claims are, as a factual matter, grossly exaggerated. But even accepting each of the incumbent LECs’ asserted facts, they do not show that the CLECs’ ability to compete would not be impaired if they were denied access to unbundled local switching. The incumbent LECs have not even attempted to show (and indeed cannot show) that CLECs could rely upon their own switches and successfully pursue mass-market entry, and none of their alleged facts rebuts the CLECs’ evidence that mass-market switch-based entry is not economically feasible today.

Numbers of switches: The *Huber Submission* and each of the incumbent LECs emphasize that CLECs have deployed, by their count, over 700 local switches.²⁰⁴ These numbers, at least as used by the incumbent LECs, significantly overstate the deployment of local switches. For example, the incumbents treat the deployment of AT&T’s 4ESS switches as a local switch, even though these switches cannot terminate analog lines and cannot be used today to provide certain basic aspects of local service – such as emergency 911, information, and operator services – that are essential to a comprehensive local service offer. Even accepting the incumbent’s numbers at face value, however, the fact remains that CLECs collectively have fewer than four percent of the

²⁰² GTE at 43, 45; *see* Ameritech at 80 (“switches are relatively inexpensive, fully scalable, and can be quickly and easily installed”).

²⁰³ SBC at 10, 41-42 (switching from other CLECs can be “readily obtain[ed]”); U S WEST at 44; BellSouth at 59-60 (a wholesale market for switching already “has developed”); GTE at 47.

²⁰⁴ *E.g.*, *Huber Submission* at I-1 to 1-2; SBC at 34-35; GTE at 39-42; Bell Atlantic at 20-21; Ameritech at 70-71; BellSouth at 58-59; U S WEST at 42-43.

number of local switches that the incumbents have deployed – a fraction of the capacity CLECs would need to offer a mass-market switch-based alternative to the incumbent LECs’ service. AT&T at 88-91.

Furthermore, contrary to the incumbent LECs’ predictions, the deployment of these CLEC switches does not herald the dawn of mass market switch-based competition. The incumbent LECs provide no evidence that any CLEC is deploying local switches as part of a plan to offer service to the mass market. For example, while GTE provides maps and tables to identify the switches that it claims CLECs have deployed in its territories, this inventory does not “demonstrate” that CLECs’ switches can economically and practically “be used to serve *any type* of customer, from the smallest residence to the largest business.”²⁰⁵ Of course, it is true that local switches (as opposed to the 4ESS) “can” – as a matter of technical feasibility and once numerous other operational considerations are satisfied – be used to provide local service to customers. But GTE and the other incumbent LECs simply fail to address the economic and practical reasons why, in the real world, the CLECs are not using their switches to provide broad-based local service. *Compare, e.g.*, GTE at 39-49 with AT&T at 93-99.

Extended reach: The incumbent LECs also place great weight on their argument that CLEC switches have a greater geographic range than do incumbent LEC switches. For example, they stress that CLECs can extend the geographic range that a single switch can serve by adding

²⁰⁵ GTE at 44 (emphasis added) (citing Kahn Decl. at 10); *see also* U S WEST at 45 (casually referring to “CLEC switches that can serve all the customers served” by the incumbent LEC).

equipment like digital loop carriers or remote switch modules,²⁰⁶ and claim that “the great majority of the continental United States could still be served just by the CLEC switches that are operational *today*.”²⁰⁷

These claims are overblown in two obvious respects. First, extending the geographic reach of a switch does not increase its capacity. Thus, even if a particular local switch, in conjunction with other equipment, can be used to serve customers scattered throughout a broad geographic area of 100 or 600 miles, that single switch would still lack the capacity to serve a significant percentage of customers in all but the most sparsely populated localities in that area.

Second, technical feasibility is not enough to demonstrate the absence of impairment. The incumbent LECs adduce no evidence that counters AT&T’s showing (or BellSouth’s consultant’s concession) that the costs of extending unbundled loops to a remotely located switch – even one that is 10 miles away, let alone 100 or 600 miles – are prohibitive for most customers. AT&T at 94-95. Yet, as the *Huber Submission* concedes, the technical reach of a switch is ultimately irrelevant – “[t]he *effective* footprint of a switch ultimately depends on how much it costs to haul traffic from distant points to that switch.” *Huber Submission* at I-25 (emphasis added); see BellSouth at 56 (“the reach of a switch is determined by its technical capabilities and the economics of transport”); Ameritech Aff. of William L. Fitzsimmons at 15 (for CLECs that “make

²⁰⁶ Ameritech at 78; Bell Atlantic at 21-22; BellSouth at 58; GTE at 46; *Huber Submission* at I-23 to I-24; SBC at 38-39; U S WEST at 44; Cincinnati at 2.

²⁰⁷ GTE at 47. GTE further asserts that, by deploying remote switching modules, CLECs could use the switches deployed today in just seven cities to “reach[.]” *all* of the 190 million access lines in “the entire continental United States.” GTE at 46.

value-based decisions” about “extending transport and switching facilities [t]wo important factors” in those decisions are “the distances of transport necessary to connect wire centers and the amounts of access lines and revenues that a CLEC can gather at the ILEC’s wire centers”).²⁰⁸ Because the incumbent LECs do not assess the impact of these transport costs, their claims that CLEC switches can have a wide geographic range fails to demonstrate that CLECs can effectively employ them to compete within that range. In fact, as AT&T showed, for CLECs that seek to compete on a broad basis, the added costs of extending loops, without regard to other costs of deploying a stand-alone switch, create a substantial impairment compared to the availability of unbundled local switching.

Speed of deployment: Another fundamental point that the incumbent LECs overlook is that the speed with which a switch can be deployed is irrelevant if that switch cannot effectively be used to serve a particular market. If a truck is the efficient means for a delivery company to move packages between two adjacent small towns, the fact that a competitor could take immediate delivery of a Boeing 737 would not make it any more likely that the competitor would

²⁰⁸ As demonstrated in the attached Affidavit of Michael R. Baranowski, John C. Klick and Brian F. Pitkin (Exh. A), the model described in the Fitzsimmons Affidavit in no way adequately shows that CLECs would not be impaired by these costs. Indeed, the model’s most fundamental flaw is that it reflects the incumbent LECs’ improper view of the impair standard and simply asks whether it could be profitable for CLECs, using a gradual deployment of facilities over time, to enter in limited and targeted local markets. Thus, the model fails to address the primary question at issue in this proceeding: whether CLECs would be impaired in providing services they seek to offer if access to unbundled switching or other elements were denied. Moreover, as Messrs. Baranowski, Klick and Pitkin explain, the model fails to disclose its analyses and assumptions in several critical respects, which makes the model difficult to review and impossible to verify. Baranowski/Klick/Pitkin Aff. ¶¶ 19-20. To the extent the model discloses those assumptions, moreover, it is readily apparent that many are not conservative and that the model overstates potential revenues and understates costs for a CLEC entrant. *Id.* ¶¶ 8-18.

purchase a 737 to compete for that business.²⁰⁹ Thus, even if a CLEC could deploy a dozen switches a day, no CLEC would purchase them to serve the mass market if the costs of extending unbundled loops to those switches would cause it to lose money on its service or if problems with the coordinated hot-cut process would prevent it from delivering timely and high quality service to its new customers.

As a factual matter, the incumbent LECs badly overstate the case for rapid switch deployment.²¹⁰ The suggestion in the *Huber Submission* that most switches can routinely be deployed “in 40 days” is unsupported even by the source on which he relies.²¹¹ The process of deploying a switch requires a CLEC to study the market to determine the market demand and the optimal locations for switch deployment; purchase and condition a site for the switch; obtain collocation space in all of the incumbent’s central offices where the CLEC will access unbundled loops;²¹² order and install the switch; and finally test and integrate it into the CLECs’ network and

²⁰⁹ Indeed, the cost of the jet fuel alone (as compared to ordinary gasoline) would likely raise the competitor’s costs above a competitive level.

²¹⁰ Ameritech at 70 n.149 & 81-82; SBC at 40; BellSouth at 58; GTE at 45-46; *Huber Submission* at I-29 to I-30.

²¹¹ The *Huber Submission*’s claim (at I-30) of a 40-day installation is drawn from a Lucent-produced publication, see www.lucent.com (search of site for “Prefab COs Speed Market Entry”), which itself notes that the standard operating procedure or “SOP” on “central office deployment” involves numerous steps, including “renting or buying a commercial property [and] re-conditioning the building to serve as a CO, *all of which can take up to a year.*” *Id.* (emphasis added). The 40 day period for installation thus comes on top of the many other steps necessary to deploy a switch. In addition, the interval apparently applies only to “prefab central offices,” and not to switches that are deployed in existing buildings.

²¹² Numerous comments support AT&T’s argument that collocation imposes undue delays on CLECs that want to use their own switches. AT&T at 96 & Pfau Aff. ¶¶ 16-17, 25; Sprint at 34-39; Cal. PUC at 4-5; CPI at 21. Some incumbent LECs (Ameritech at 82-83; BellSouth at 61
(continued . . .)

operations support systems. Each of these steps takes significant time: Switch vendors, for example, typically do not deliver a switch until two-and-a-half to three months after the order is received, and installation can take an additional three months. *See Huber Submission* at I-30 (citing e.spire statement of seven months from placing an order to deployment of switch); CompTel at 39 & n.89 (citing Affidavits of Martin J. Arias and Richard L. Tidwell) (testifying that switch deployment takes “up to 9 months” or even “almost two years”); *cf.* GSA at 12 (urging the Commission to find that a delay of just “60 days” for an alternative supply constitutes an impairment). The comments thus reinforce the Commission’s prior finding that it takes between nine months and two years to deploy a new switch. *First Report and Order* ¶ 411. Such a delay for the installation of a single switch, plus the delays inherent in a broad deployment of switches, represents substantial impairment for CLECs compared to the almost immediate availability of unbundled local switching.

Competitors’ Switches: The incumbent LECs also argue that CLECs do not need access to unbundled switching because a CLEC “can as readily obtain switch capacity from other CLECs

(. . . continued)

n.59; SBC at 40) suggest that the Commission’s recent order in the advanced services proceeding removes all of the flaws in the collocation process. *See First Report and Order and Further Notice of Proposed Rulemaking, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147 (March 31, 1999). Though the order is helpful in many respects and requires incumbent LECs to implement several practices that could open more space in central offices (such as allowing CLECs to tour central offices and requiring incumbents to remove obsolete equipment), it has not yet been implemented and it does not address other impediments to CLECs’ ability to obtain timely and reasonably priced collocation space. Most notably, the Commission did not require specific provisioning intervals or cap space preparation fees, so that lengthy delays and very large costs for collocation may very well continue to impede CLECs’ ability to deploy their own switches.

as it can from an ILEC.”²¹³ This claim is both baseless and absurd. CLECs, unlike the incumbent LECs, are not obliged under section 251 to provide nondiscriminatory access to unbundled network elements at cost-based rates. Even assuming that CLECs had excess switching capacity and were willing to make it available to competitors,²¹⁴ however, there is no evidence that CLECs have (or are developing) the OSS capabilities they would need to provision other CLECs with and bill for unbundled switching with the same timeliness and quality as incumbents are obliged to provide. Thus, the availability of such switch capacity would not overcome the impairments caused by lack of access to unbundled switching from the incumbent. Moreover, reliance on other CLECs’ switching would not overcome the economic obstacles of extending loops, or the practical obstacles of being dependent upon coordinated cutovers that make reliance on any CLEC switch unsuitable as a means of offering mass-market local competition. Indeed, as SBC’s description of the process of using another CLEC’s switch illustrates (SBC at 41-42), establishing such service would, if anything, compound those problems by placing the CLEC in a state of dependence not only upon the incumbent LEC and its technicians but upon another CLEC as well. Beyond this, and even accepting the incumbents’ argument that CLECs would deploy a very few

²¹³ See SBC at 10, 41-42; BellSouth at 59; U S WEST at 45.

²¹⁴ The incumbent LECs provide no evidence that such excess capacity is readily available, and the record suggests the opposite is true. For example, one CompTel member in SBC’s territory states that it “would like to purchase switching capacity from other sources if available” but that it is “not aware of any existing carriers that offer switching on a wholesale basis.” Affidavit of Richard L. Tidwell, Birch Telecom ¶ 5 (attached to CompTel Comments); see also CPI at 22; TRA at 35; Qwest at 72; Sprint at 22-23, 31; Tex. PUC at 12; Ill. CC at 9, 10.

switches with wide geographic reach, it is unlikely that the optimal deployment for one CLEC would cost-effectively serve the customer base of other CLECs.

CLEC presence in selected cities: Finally, GTE, the *Huber Submission*, and numerous incumbent LECs point to selected cities and assert that the number of CLEC switches deployed in those cities proves that local competition is robust.²¹⁵ These city-specific switch-inventories share all the shortcomings of the incumbent LECs' national compilations. By ignoring how CLECs are actually using their switches in these cities, what types of customers CLECs are able to serve, and the degree of market penetration CLECs have achieved, the incumbent LECs' analysis fails to demonstrate that CLEC efforts to compete are not impaired by the unavailability of unbundled local switching.

The analysis of Washington, D.C., is a case in point. The *Huber Submission* (at I-12) portrays Washington as a hotbed of local competition, where "14 CLECs operate 23 switches" and where "[f]ifty percent of the rate exchange areas in the MSA are served by at least one CLEC switch." But neither the *Huber Submission* nor any incumbent LEC pauses to consider what any resident of Washington, DC, knows: the presence of these CLEC switches has *not* translated into competitive choices for most consumers. Indeed, nowhere do the incumbent LECs assess the CLEC market share of even the market segment representing high-volume business customers that CLECs have targeted with these switches, let alone the CLEC share of the small business or residential markets that are not the CLECs' principal focus.

²¹⁵ See Bell Atlantic at 21, 24-25; *Huber Submission* at I-10 to I-19 & App. A; Ameritech at 74-76; GTE at 40-42, 46-47; BellSouth at 58-59; U S WEST at 43; SBC at 36, 38.

The incumbent LECs' myopia is obvious in the *Huber Submission's* discussion of AT&T's local presence in Washington, DC. The submission (at I-12) states that "AT&T operates a Nortel DMS 100 to serve 37 rate exchange areas, and two Lucent 4ESSs to serve 21 more." The Nortel DMS 100 is a local switch that AT&T can use to offer local service in the area, but with a capacity of approximately 100,000 lines it is plainly not capable of supporting a broad-based offer to all or most customers in this MSA. Moreover, to reach customers throughout the MSA using this switch, AT&T would need to establish collocation space in every central office (and Bell Atlantic maintains about 25 central offices in that MSA), deploy equipment in each collocated space to extend the loops to AT&T's switch, and then build or lease transport to carry it there. For these reasons, AT&T is not attempting to, and could not, offer local service broadly throughout the Washington MSA with its DMS-100 switch.

Furthermore, as noted above, the two 4ESS switches deployed by AT&T in the Washington MSA are *not* the equivalent of local switches, as Huber mistakenly suggests. These toll switches can be used to offer local service, but only to business customers that have a PBX on their premises and that generate sufficient volume to justify a T1 link between the customer's premises and AT&T's switch.²¹⁶ Moreover, even these high-volume customers, which constitute a small percentage of all customers, must continue to obtain certain basic local services, such as emergency 911, directory assistance, and operator services, from the incumbent LEC, because the

²¹⁶ 4ESS switches, for example, cannot provide service to customers using analog voice grade loops.

4ESS was not designed, and cannot currently be used, to provide them. Because of these limitations, AT&T's existing toll switches simply cannot be enlisted to support mass-market entry.

Similarly, AT&T's two 5ESS switches in Dallas, to which GTE refers (GTE at 41), are not being used "to reach . . . as much as 98 percent . . . of the addressable business and residential market," as GTE claims is the case. GTE at 32 (citing PNR Report at DFW Microplex at 4). Rather, those switches, like AT&T's DMS-100 in Washington DC, are being used to offer service to business customers. The same is true for each of AT&T's local switches in the other markets, such as Los Angeles, Denver, Detroit, and Tampa, that GTE and the *Huber Submission* purport to survey. Indeed, AT&T's ability to use these local switches to serve even the business customers for which they are intended is significantly compromised by continuing difficulties AT&T experiences getting access to buildings using its own fiber facilities, *see supra* Part IV.A & Lynch Aff., and in getting prompt and reliable coordinated hot cuts. *See* AT&T at 101-04. As a result, even in a large market like Dallas, CLECs have gained at most just over 3 percent of the market, a figure that completely dispels any notion that CLECs' facilities there have created robust local competition.²¹⁷

In sum, nothing in the incumbent LECs' survey of competition undercuts the evidence adduced by AT&T and other commenters that the lack of access to unbundled local switching significantly impairs CLECs' ability to serve the mass market.

²¹⁷ This figure is derived from GTE's 98.54 percent market share throughout Texas (*see supra* Part I): AT&T estimates that 44 percent of GTE's lines in Texas are in Dallas, and, assuming that *all* of the CLECs lines they serve in Texas are located in Dallas – which is not in fact true and which inflates their market share in Dallas – GTE's total market share for Dallas is 96.75 percent.

2. The Incumbent LECs' Inability To Provision Unbundled Loops In The Timely And Reliable Manner Needed For Successful Mass Market Entry Independently Justifies The Need For Unbundled Local Switching.

Most incumbent LECs also entirely overlook the second independent reason why lack of access to unbundled local switching would significantly impair the CLECs' ability to provide local service: Incumbent LECs could not provision, in either a timely or reliable manner, the volume of coordinated hot cuts needed to support mass-market entry.²¹⁸

Only three incumbents even attempt to address this issue. Tellingly, none denies that incumbents have generally failed to provision even small volumes of coordinated hot cuts in a timely and accurate manner, or that CLEC customers frequently have suffered service outages of hours and even days due to incumbent LEC errors. Instead, they simply ask the Commission to look the other way.

For example, SBC invents a novel assertion: that each potential network element must be "judged in isolation" from other elements to determine whether denial of that element would be an impairment under Section 251(d)(2). SBC at 9-11. SBC offers no textual or policy reason for such a rule, and there is none. To the contrary, the Commission has held that the "access to network elements" that is required by Section 251(c)(3) "refers to both the physical or logical connection to the element and the element itself."²¹⁹ Thus, even if unbundled switching were to be "judged in isolation," the Commission would need to examine the connections between

²¹⁸ Of course, the availability of unbundled switching does not relieve the incumbents from their duties to provide hot cuts to CLECs that have provisioned their own switches and need hot cuts to provide service.

²¹⁹ See *First Report and Order* ¶ 312.

switching and adjacent network elements to determine whether the failure to provide “access” to unbundled switching constitutes an impairment. Similarly, because a network element is useful in providing a service only insofar as it can be effectively connected to and used with other network elements, SBC’s proposed “isolation” test would improperly exclude from consideration facts that are essential to determining whether CLECs are impaired in their ability to “provide . . . services.”²²⁰

It also is evident that SBC’s rule has been invented solely to avoid addressing coordinated hot cuts, for even SBC cannot bring itself to follow its novel rule when something other than coordinated hot cuts is at issue. In discussing signaling, SBC begins (at 43) by observing correctly that “[s]ignaling is a servant to switching.” SBC then reasons that, “to the extent section 251 requires incumbent LECs to unbundle their switches, SBC agrees that incumbent LECs must also provide CLECs access to the ILEC signaling network for purposes of the unbundled switching.” *Id.* Of course, this is the right answer with respect to signaling (*see* AT&T at 110), but it is irreconcilable with SBC’s “judge-in-isolation” rule.

SBC’s failure to follow its own rule illustrates a more basic and important point. In a network composed of elements that must be used together to provide service, the utility of one element is often related to, and may even depend upon, the nature and availability of another. Thus, the Commission should reject incumbent LECs’ requests that it willfully blind itself to such interdependence. Indeed, as discussed above, the language of Section 251(d)(2)(B), and the

²²⁰ 47 U.S.C. § 251(d)(2)(B).

Commission's prior finding that "access" to a network element under Section 251(c)(3) refers to physical and logical connections to the element as well as to the element itself, preclude the Commission from doing so.²²¹

BellSouth (at 61) and GTE (at 45 n.32) contend that the Commission should ignore the delay, cost, and service-quality impairments for offering service to the mass market that stem from the coordinated-hot-cut process, because permitting some CLECs to obtain combinations of unbundled loops and unbundled switching would give them a competitive advantage over CLECs that used their own switches. This argument is irrelevant. The Act provides CLECs with different entry vehicles, each of which carries its own advantages and disadvantages for a give CLEC based on its own unique position. But all of these options are accorded equal weight under the Act and the Commission's prior decisions. *See First Report and Order* ¶ 12. Notably, CLECs that are actively deploying their own switches today, such as AT&T and MCI, are also actively seeking access to unbundled switching. Unbundled switching is attractive not as a replacement for the deployment of switches, but as a complement to such deployment that will enable CLECs to reach out and serve broad segments of the local markets for which they otherwise could not effectively compete. The demand for unbundled switching is thus consistent

²²¹ GTE (at 45 n.32) also suggests that the Commission should look for some other "remedy" for the incumbent LECs' poor performance of hot cuts, and not consider the ways in which reliance on coordinated hot cuts, rather than on unbundled switching, impairs the CLECs' ability to offer local service. This is equivalent to SBC's argument that the Commission should ignore the interdependence of network elements, and should likewise be rejected.

with the Commission's expectations that "some new entrants will follow multiple paths of entry" and that some "may use a combination of entry strategies simultaneously." *Id.*

3. Actual Market Experience Confirms The Need For Unbundled Local Switching.

Finally, the incumbent LECs argue that CLECs have rarely ordered unbundled switching and that this alone shows that CLECs do not need access to it.²²² Of course, the reason that CLECs have not ordered unbundled switching is that incumbent LECs have largely refused to make it available in combination with other elements. Where unbundled switching is being made available in combination with other elements and at cost-based rates, CLECs are pursuing broad-scale market entry using such combinations. *See supra* p.24.

C. Signaling and Call-Related Databases

The comments overwhelmingly confirm that the Commission should continue to require unbundled access to signaling and databases. Even the incumbent LECs admit that "[s]ignaling is a servant to switching" and that "[t]o the extent that a CLEC purchases unbundled switching from an [incumbent LEC], it must necessarily connect to that same ILEC's signaling network."²²³ The same is also true for the incumbent LECs' databases that supply essential information to the switches for call processing. Because it is technically infeasible for a single switch to access a

²²² BellSouth at 60; Ameritech at 71; U S WEST at 43; Cincinnati at 6.

²²³ SBC at 43; *see also* Ameritech at 114; U S WEST at 47; BellSouth at 76 ("when a CLEC takes unbundled switching from an incumbent, the incumbent LEC provides signaling, using its databases"). Notably, the incumbent LECs' position on signaling and databases directly contradicts – and demonstrates the folly of – their assertion that the impairment test of Section 251(d)(2) must be applied to each element "in isolation." SBC at 10; *see supra* p. 106.

variety of databases for the same function, an unbundling obligation must exist for the call-related databases where the CLEC purchases unbundled switching. See U S WEST at 47 (when unbundled switching is purchased, the incumbent must also unbundle “signaling *and* call-related databases”) (emphasis added); see also BellSouth at 76.

D. Shared Transport

The comments overwhelmingly confirm the Commission’s repeated holdings that without access to unbundled shared transport new entrants will be significantly impaired in their ability to provide a mass market alternative to incumbent LEC service. The Commission has already found that access to shared transport is “particularly important” for mass market entry because no new entrant can accurately predict in advance the location of its customers or their calling patterns and volumes, and hence no new entrant can design in advance an efficient transport network.²²⁴ The comments of AT&T, other CLECs, and state commissions underscore the fact that shared transport is a critical unbundled network element that CLECs must have in order to compete against the incumbent LECs’ inherent advantages of scale, scope, connectivity, and density.²²⁵

²²⁴ See Third Order On Reconsideration and Further Notice of Proposed Rulemaking, *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, 12 FCC Rcd 12460, 12481 ¶¶ 34, 35 (Aug. 18, 1997) (“*Shared Transport Order*”); Memorandum Opinion and Order, *In the Applications of NYNEX Corp., Transferor and Bell Atlantic Corp., Transferee, For Consent to Transfer Control of NYNEX Corp. and its Subsidiaries*, 12 FCC Rcd. 19985 ¶¶ 199-200 (1997) (“*Bell Atlantic NYNEX Merger Order*”).

²²⁵ See, e.g., AT&T at 108-09; Allegiance at 18-19; Excel at 11; KMC at 14-15; MCI at 62-63; Net2000 at 14; Qwest at 78-80; RCN at 17-18; Sprint at 28; ALTS at 49-52, 85-86; CompTel. at 42-43, 47-53; CPI at 22-27; TRA at 38; GSA at 4-6; Connecticut DPUC at 4; Illinois CC at 13; Iowa UB at 6-7; Kentucky PSC at 2; Texas PUC at 14-15.

In the *Shared Transport Order*, the Commission found that a denial of access to unbundled shared transport “would significantly increase [CLECs’] costs” and thereby “reduce competitive entry into the local exchange market” (*id.* at ¶ 34) and traced those increased costs to the lack of “an opportunity to determine traffic volumes and patterns” that would lead new entrants “almost inevitably [to] miscalculate the capacity or routing patterns.” *Id.* ¶ 35. These prior findings fully satisfy the statutory requirements for an unbundled network element under both the “impair” and the “necessary” standards. The record in this proceeding, in turn, powerfully reinforces the validity and continuing importance of those findings. Because shared transport remains vital to mass-market entry, it should be made available as an unbundled element.

Except for Ameritech and U S WEST, the incumbent LECs make no effort to argue specifically against shared transport. Instead, they broadly argue that CLEC deployment of *some* interoffice transport facilities shows that CLECs do not need *any* interoffice transport facilities as a network element,²²⁶ or that “geographically specific fact-finding” is required.²²⁷ These generic arguments lack merit with regard to dedicated transport (*see* Part IV.E, *infra*), and they do not begin to address the unique additional considerations to shared transport that the Commission recognized in its prior decisions.

Ameritech and U S WEST oppose providing access to shared transport on the ground that it is accessible only through unbundled switching which, in their view, does not independently, or

²²⁶ Bell Atlantic at 26-32; BellSouth at 47-55; GTE at 57-63.

²²⁷ USTA Comments at 36-37.

on a “standalone basis,” satisfy the impaired standard. U S WEST at 53; Ameritech at 95. Because the CLECs’ need for unbundled switching is manifest, this argument fails under even the incumbent’s erroneous standard.²²⁸ But it also fails because it does not address the obvious impairment that would result if CLECs were denied access to this element. Indeed, the need for shared transport is so compelling that, as AT&T shows (at 98-100), it alone would justify making switching available as a network element, simply to ensure that CLECs have access to the essential scale-economies and network-design efficiencies that shared transport uniquely provides.²²⁹

Ameritech’s lead argument is frivolous.²³⁰ Ameritech claims (at 94-95) that, by affirming the *Commission’s* definition of the term “unbundled,” the Supreme Court somehow simultaneously enshrined *Ameritech’s* view that to be unbundled a network element must be “capable of being purchased separately” from other elements. But Ameritech can make this illogical argument only by conspicuously failing to quote what the Supreme Court actually held. Ameritech simply asserts (*id.*) that the Court held that “each element in the combination still must be capable of being purchased separately.” In truth, the Court expressly rejected the incumbent

²²⁸ See *supra* Part IV.B.

²²⁹ The need for unbundled shared transport also supports making unbundled tandem switching available as a network element, for the provision of shared transport requires access to tandem switching. See also AT&T at 109 (describing additional reasons for including tandem switching as an unbundled network element)

²³⁰ It is not surprising that no other incumbent LEC joins in Ameritech’s arguments, because most of these arguments rehash positions that Ameritech has offered – without success – time and again before its state commissions, this Commission, and the Eighth Circuit. Ameritech’s crusade against shared transport should end here.

LECs' argument that unbundled elements had to be capable of being "physically separated" (a concomitant of Ameritech's "separate-purchase" requirement). *AT&T v. Iowa Utils. Bd.*, 119 S.Ct. at 737. Moreover, the Court held that "[t]he dictionary definition of 'unbundled (and the only definition given, we might add) matches the FCC's interpretation of the word: 'to give separate prices for equipment and supporting services.' Webster's Ninth New Collegiate Dictionary 1283 (1985)." *Id.* (emphasis added).

Unbundling shared transport is fully consistent with the Court's "separate pricing" definition. It is not only possible but desirable to set separate prices for shared transport and unbundled switching, for two reasons. First, unbundled switching may be combined either with dedicated or shared transport at the CLEC's option, and thus the transport charge cannot reasonably be incorporated into the price of switching. Second, a CLEC's decision to migrate from shared to dedicated transport will depend, in significant part, on its ability separately to track its shared transport costs.

Ameritech's approach is foreclosed not only by *Iowa Utilities Bd.*, but by the untenable consequences of its approach when applied to switching. It is not feasible for a CLEC to purchase unbundled switching without also purchasing another unbundled network element – signaling and call-related databases. Thus switching, like shared transport, is not a stand-alone element and – under Ameritech's theory – would not qualify even for consideration as a potential unbundled network element. The absurdity of that result, which would do obvious violence to the statutory language and Congress's intent to create a separate unbundled network element-path of local entry, also requires rejection of Ameritech's approach.

Ameritech's next argument is that provision of shared transport depends upon the use of Ameritech's "routing tables," and that these are proprietary features of the switch. This argument is both unsubstantiated and, ultimately, irrelevant. First, Ameritech offers no credible reason for its naked assertion that its routing tables are "proprietary." No other incumbent LEC makes a similar claim, for one very good reason: These tables are nothing more than software instructions that select a route through the network for each call based on the digits dialed.²³¹ Establishing and maintaining such tables requires effort, to be sure, but not creativity or skill – they are simply the product of the sweat-of-the-brow using destination information contained in the Local Exchange Routing Guide ("LERG") and Ameritech's knowledge of what facilities it has deployed in its network. Ameritech makes no claim otherwise, and indeed it could not make any such claim. At bottom, its routing tables simply implement the logic that is inherent in the very architecture of the incumbent's network.²³²

Furthermore, even if there were something proprietary about these tables, that fact would not alter the CLECs' compelling need for shared transport. By purchasing shared transport, CLECs are only passive users of the routing tables (*i.e.*, the tables select a route for a call), and they would not gain access to any allegedly "proprietary" information contained therein. Thus any interest Ameritech could have in protecting what it considers to be "proprietary" aspects of its

²³¹ These tables are used in conjunction with the routing information contained in the SS7 network.

²³² See AT&T at 54 (routing tables are "monopoly assets" that "merely use the information about traffic patterns and volumes that Ameritech has obtained through years of franchised monopoly status").

routing tables would not be compromised by CLEC access to shared transport.²³³ AT&T at 54. And in any event, access to unbundled shared transport is necessary. Apart from a vague and frivolous discussion of its willingness to offer an alternative transport “service” that would not be subject to the Act (discussed below), Ameritech makes no effort to rebut the Commission’s earlier decisions, or to show that CLECs would not be significantly impaired in their ability to pursue mass market entry if they were denied access to shared transport. The Commission’s prior findings of the competitive need for shared transport remain valid today.

Ameritech then asserts that a new “service” that it proposes to offer, which it calls “end office integration” (“EOI”) and only vaguely describes, is an adequate substitute for the provision of unbundled shared transport. Ameritech at 97-99; *see* Ameritech Attachment C (following Fitzsimmons Affidavit). That argument is untenable on its face. It flatly contravenes the basic principle, established in the *First Report and Order* and affirmed by the Eighth Circuit, that an incumbent LEC may not “avoid Section 251(c)(3)’s unbundling obligations by offering unbundled elements” at higher, non-cost-based prices.²³⁴ For this reason alone, Ameritech’s reliance on EOI is meritless.

Moreover, EOI provides a classic illustration of the critical need for this principle. While Ameritech claims (at 99) that its rates for EOI would be “economical,” this claim cannot be taken

²³³ Similarly, CLECs also are passive users of the routing tables established in the STP to route signals through the signaling network.

²³⁴ *First Report and Order* ¶ 287; *see Iowa Utils. Bd. v. FCC*, 120 F.3d 753, 809 (8th Cir. 1997); AT&T Comments at 123-25.