

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Appropriate Framework for Broadband Access to the Internet over Wireline Facilities)	CC Docket No. 02-33
)	
Universal Service Obligations of Broadband Providers)	
)	
Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements)	CC Dockets Nos. 95-20, 98-10
)	

COMMENTS OF GENERAL COMMUNICATION, INC.

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General Communication, Inc. (GCI) submits these comments in response to the Commission’s *Notice of Proposed Rulemaking* addressing the appropriate regulatory framework for broadband access to the Internet over wireline facilities.¹ GCI limits its comments to the issue of whether the Commission should eliminate the safeguards established in its *Computer II* decisions.² This docket is one of a series of proceedings that the Commission has undertaken to review the regulatory treatment of ILEC broadband services and facilities, none of which can or should be considered in isolation.³

¹ *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, Notice of Proposed Rulemaking, FCC 02-42, 2002 LEXIS 824 (rel. Feb. 15, 2002) (“*NPRM*”).

² *NPRM* at ¶¶ 43-53.

³ *See Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Notice of Proposed Rulemaking, FCC 01-361, 16 FCC Rcd. 22781 (2001)

I. Introduction and Summary

In the NPRM, the Commission seeks comment on whether to repeal the safeguard adopted in *Computer II* that a facilities-based common carrier that offers an information service “acquire transmission capacity [from itself] pursuant to the same prices, terms and conditions reflected in their tariffs.”⁴ While this safeguard may have outlived its usefulness in markets with abundant alternative facilities-based capacity, such as interstate backbone markets, *Computer II*’s fundamental concern of separating control of common carrier transmission facilities from the provision of information services in order to allow non-common carriers to provide information services remains.⁵ ILECs still hold the only means of reaching significant segments of the market, even with the advent of cable modems and asymmetric, two-way satellite delivered Internet access services. Current customers subject to these ILEC bottlenecks would no longer have any alternatives and ILEC control of these bottleneck facilities would be cemented if the Commission, in its *Triennial UNE Review* proceeding, also grants ILECs’ requests that high capacity loops, such as DSL-qualified, no longer be required to be unbundled.

The ILECs, with overblown assertions of competition in the provision of retail broadband services, portray themselves as 98-pound weaklings, asserting that they are

(*Triennial UNE Review*); *Performance Measurements & Standards for Unbundled Network Elements and Interconnection*, Notice of Proposed Rulemaking, FCC 01-331, 16 FCC Rcd. 20641 (2001); *Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, Notice of Proposed Rulemaking, FCC 01-360, 16 FCC Rcd. 22745 (2001) (“*ILEC Dominance NPRM*”).

⁴ *Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, Final Decision, FCC 80-189, 77 FCC 2d 384, 475 (1980) (“*Computer II*”).

⁵ The Bell Companies do not serve Alaska. Thus, *Computer III* does not apply in Alaska.

“newcomers” into a market in which they have “no monopoly.”⁶ But these assertions gloss over the fact that the ILECs possess the only ubiquitous network capable of reaching all business and residential customers. In Anchorage, 50% of business are not passed by cable, but every one of them is reached by a telephone line. Ubiquity of these underlying facilities is the ILECs’ major asset, and it is an asset they have solely as a legacy of their historical telephone monopolies.

To be sure, there are market segments in which ILECs face vigorous head-to-head competition for some types of broadband service and, in some instances those offerings are provided over alternative broadband facilities. In the marketplace to provide broadband Internet access services to the home in geographic areas served by cable modem service, ILECs certainly are challenged by full facilities-based competition at the residential retail level. But the existence of competition from a cable operator providing asymmetric Internet access service to residential consumers does not equate with competition serving businesses that desire higher upstream capacities or a more reliable level of service. Nor can the cable operator provide competition to serve a business that is not passed the cable network. Rigorous and appropriately granular market analysis is the essential foundation for decisionmaking regarding appropriate regulatory treatment, for without an accurate assessment of product and geographic markets, the Commission cannot make a rational, well-reasoned determination consistent with its precedent and established competition analysis.

⁶ Comments of Verizon, CC Docket No. 01-337 (filed Mar. 1, 2002) at 1. *See also* SBC Petition for Expedited Ruling That It Is Non-Dominant in Its Provision of Advanced Services and for Forbearance from Dominant Carrier Regulation of Those Services, CC Docket No. 01-337 (filed Oct. 3, 2001) (“SBC Petition”) at 7.

In markets in which the ILEC has significant market power -- and particularly in those areas where ILEC facilities must be accessed in order to provide the competing product the customer seeks – the ILECs should not be relieved of both the *Computer II* obligation to offer transmission separately and the obligation to unbundle underlying loops. Doing so would eliminate *intramodal* competition in markets in which there is no *intermodal* competition. Moreover, even if the Commission retains high-capacity loop unbundling, but it also fails to enforce ILEC provisioning in a timely and non-discriminatory manner, the effect in the marketplace would be the same as if unbundling had not been required. Absent intermodal competition sufficient to challenge a “small but significant and non-transitory increase in price,” and absent the unbundling and adequate operational support systems (OSS) that are predicates for intramodal competition, removing the *Computer II* safeguard and eliminating unbundling of high capacity loops, including DSL-qualified loops, would give ILECs the ability to leverage control of physical transmission facilities into control of specific information services geographic and product markets. There is no justification for such a striking retreat from the 1996 Act’s goals of a “pro-competitive”, “deregulatory” telecommunications and information services marketplace.

II. Although Some Alaskans Are Served by Multiple Broadband Facilities, Many Remain Subject to an ILEC Bottleneck

A. GCI Has Pursued a Facilities-Based Entry Strategy Wherever Possible

GCI is an Alaska-based company providing competitive local and long distance voice, video and data communications services.⁷ GCI’s first service offering, initiated 20

⁷ Declaration of Frederick W. Hitz, III (filed in CC Dockets 01-338, 96-98 and 98-147, April 5, 2002 and attached hereto) (“Hitz Declaration”) at ¶ 3.

years ago, introduced long distance competition to Alaska. In 1991, GCI entered the long haul fiber optic cable market, bringing competition into the market for submarine cable transport between Alaska and the “lower 48,” and in 1998 it built the first modern and upgradeable fiber optic cable between Alaska and the rest of the continental U.S. In 1996, following passage of the Telecommunications Act of 1996 (“1996 Act”), GCI purchased cable systems that now pass 85% of Alaskan households. GCI entered the local exchange business in 1997 in Anchorage, and recently entered the Fairbanks and Juneau study areas as well.⁸ In all of its local exchange markets, GCI serves residential as well as business customers.

GCI has used the competitive entry tools of the 1996 Act to introduce ubiquitous consumer choice across a broad range of services. In local exchange voice services, using a mix of full-facilities entry, a combination of its own facilities and ILEC UNE-loops, and wholesale services, GCI has grown to serve 40% of residential and business lines in Anchorage, and 15% in Fairbanks and 3% in Juneau, markets it has been allowed to enter only within the last year.⁹ Once it receives the approval of the state regulatory commission, GCI hopes to expand its local offerings into the Glacier State Study Area, including Kodiak Island and the Kenai Peninsula. The benefits of competition for voice consumers have been dramatic: Anchorage consumers saw the most popular service

⁸ GCI was able to enter Anchorage in 1997, but was unable to enter Fairbanks until the summer of 2001 and Juneau until the winter of 2002 due to protracted litigation over lifting the "rural exemption" in Section 251(f), and subsequent interconnection arbitrations.

⁹ Hitz Declaration at ¶ 5.

package drop 26% in price, and recent rate increases by the ILEC are being stymied by GCI's refusal to follow suit.¹⁰

GCI began providing retail Internet service in 1998 and is now Alaska's largest ISP, providing both dial-up and broadband services. In Anchorage, Fairbanks and Juneau, depending on the consumer's geographic location and product needs, broadband services are provided one of three ways: over GCI's cable platform, over GCI's fiber loop, or over DSL-qualified UNE-loops in combination with GCI's electronics and fiber transport. GCI's cable modem service is used predominantly in residential areas, in part because its cable plant passes 95% of Anchorage's residences but only 50% of its businesses.¹¹ GCI's cable modem services will be available to virtually all homes passed by its cable system by year-end.

Many business customers, however, need a service with different characteristics than the cable modem service, such as faster upload speeds, symmetric transmission, dedicated bandwidth, or greater back-up power than can be provided over a cable system today.¹² For these customers, and for customers (particularly businesses) not passed by GCI's cable system, another platform is needed in order for GCI to provide ubiquitous service. Because GCI operates a fiber loop, which connects its facilities with the ILEC's five end offices in Anchorage, it serves some business customers directly off of the loop, eliminating any reliance upon ILEC facilities. Unfortunately, problems with building access and lack of capacity in conduits have proven too costly or insurmountable, and have greatly hampered GCI's ability to provide full facilities-based service directly to

¹⁰ *Id.* at ¶ 29.

¹¹ *Id.* at ¶ 9.

¹² *Id.* at ¶ 16.

those businesses passed by its fiber loop.¹³ To date, GCI serves only 20 buildings from its fiber loop. Moreover, extension of GCI's fiber facilities is difficult because many of the conduits and "ultiwalks"¹⁴ are at capacity, and ILECs typically refuse to share any reserve capacity when the facility is nearing exhaustion.

To reach its remaining business customers -- the vast majority -- GCI must rely upon access to DSL-qualified unbundled loops, which it connects to its own electronics.¹⁵ These loops are bottleneck facilities, making them an unfortunate but necessary means to deliver broadband services to customers that cannot be served by other means. Just getting the ILEC to provision a DSL-qualified loop and remove bridge taps and loading coils as necessary is a challenge and often subject to long delay. In addition, GCI has encountered problems stemming from the ILEC adding bridge taps or DAMLs without notice, causing failure of GCI's DSL services on those lines.¹⁶

Because advanced service offerings can be offered even where GCI has not yet been certified as a local exchange carrier, GCI has expanded its service well beyond Alaska's urban areas. GCI is now deploying high-speed Internet access in the Alaskan

¹³ Limited access to entrance facilities into a building and to the riser conduits within the building make it uneconomic for GCI to add customers for service over its fiber facilities. The incumbent LEC's advantages from pre-existing access to buildings and risers are simply too great. The ILEC has entrance facilities into the building as a legacy of its historical monopoly, but typically refuses to share these facilities. GCI must then receive landlord consent to put in its own entrance facilities, which are costly, especially when the building foundation must be penetrated. *See Hitz Declaration at ¶ 10.*

¹⁴ A "utiliwalk" is a sidewalk structure that houses electric and telephone cables. The utilities are accessible by opening sections of the concrete sidewalk.

¹⁵ *Id.* at ¶ 19.

¹⁶ After fighting for more than a year, an agreement was finally reached for identification and maintenance of DSL-qualified loops, but at a substantial cost to GCI, both economically and in terms of customer goodwill.

bush communities, a process that it expects to complete by 2004. GCI is using unlicensed wireless technology (IEEE 802.11), interconnected with satellite backhaul, to bridge the “first mile.” GCI makes this service, with download speeds up to 250 kbps, available to rural consumers at the same price as the urban cable modem service. Not surprisingly, it has seen a phenomenal take rate.¹⁷

As demonstrated by the array of technologies it has pursued, GCI has not hesitated to invest in the facilities necessary to bring twenty-first century telecommunications and information services to Alaska’s consumers. To date, GCI has invested more than \$750 million in integrated communications assets in markets that are some of the most rural in the United States.¹⁸

B. GCI's Provision of Ubiquitous Service Depends on Access to the ILEC's Bottleneck Facilities

Although GCI provides advanced services entirely over its own facilities whenever it can, the cold, hard reality is that *in some geographic markets, and for some product markets, GCI remains absolutely dependent upon certain ILEC facilities*. In areas not passed by GCI’s cable platform, and particularly business areas not accessible either over cable or, as a practical matter, through GCI’s fiber loop, *GCI must use UNEs provided by the ILEC*. Without access to unbundled DSL-qualified loops, GCI would be unable to provide broadband services to a substantial portion of the business market and

¹⁷ Unlicensed wireless is particularly well suited to deployment in the Alaskan bush, where small, geographically concentrated communities can be served from a single transmitter. It is not as well suited to an urban environment, which would require multiple antennas and have a heavier demand. Unlicensed services also receive no interference protection, posing a reliability challenge in urban environments with intensive RF use. Hitz Declaration at ¶ 17.

¹⁸ *Id.* at ¶ 3.

part of the residential market.¹⁹ Because there is no intermodal competition to serve these customers that cannot be served over GCI's cable or fiber networks, these customers remain fully subject to and captive of the ILEC's local exchange bottleneck, a remnant of its historical monopoly.

III. ILECs Seek to Eliminate the *Computer II* Safeguards Without Evidence of a Lack of Market Power in the Relevant Product and Geographic Market

ILECs seek to have the Commission remove the *Computer II* safeguards based only upon the theoretical possibility of intermodal competition, without a rigorous analysis of the relevant product and geographic markets or the extent to which the ILECs retain bottleneck facilities control in those markets. The ILEC requests are overbroad, failing to distinguish among separate product markets and inappropriately aggregating dissimilar geographic markets. Moreover, and especially in light of the Commission's consideration of ILEC requests to end unbundling of DSL-capable loops and other high capacity loop facilities, there is no basis for assuming that competition can adequately constrain an ILEC's ability to exert market power by raising its rivals costs.

It would be appropriate to limit the *Computer II* safeguards to markets in which a common carrier has significant market power. As the Commission, noted in the *ILEC Dominance NPRM*, it has found that market power exists either (1) when a firm has the ability to raise and sustain profitably its price for the relevant product above the competitive level by reducing its own output,²⁰ or (2) when an entity has "the ability to

¹⁹ *Id.* at ¶ 8-13. And, of course, until GCI can deploy its cable telephony systems, it requires access to UNE-loops to provide narrowband service as well.

²⁰ *ILEC Dominance NPRM* at 22749 n.12, 22760, ¶ 28.

raise prices by increasing its rivals' costs or by restricting its rivals' output through the carrier's control of an essential input, such as access to bottleneck facilities."²¹

Consistent with FCC precedent,²² ILECs seeking to establish that they lack market power bear the burden of proof in establishing the following:

- (1) sufficient competition exists in the relevant product and geographic market to prevent anti-competitive behavior;
- (2) non-discriminatory, timely and cost-based access to the essential inputs controlled by the relevant carrier in the upstream market is guaranteed and enforced; and
- (3) safeguards exist that preclude the carrier from leveraging its dominance in the upstream market to affect competition in the downstream market.

As demonstrated by Ad Hoc, WorldCom, AT&T and others in their comments in the *ILEC Dominance* proceeding, the ILECs are far from establishing that these conditions prevail in the various local broadband product and geographic markets today. By contrast, all of these conditions can be easily satisfied in the long-haul fiber market.

A. The FCC Must Rigorously Review and Correctly Identify the Relevant Product and Geographic Markets

The starting point for determining whether the *Computer II* safeguards remain necessary should be whether an ILEC possesses market power in the relevant product and geographic markets, which the Commission has done in accord with the methodology of the *Horizontal Merger Guidelines*.²³ The relevant markets are defined from the

²¹ *Id.* See also *Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area*, 12 FCC Rcd. 15756, 15802-3, ¶ 83 (1997) ("*LEC Classification Order*").

²² See *LEC Classification Order*. at 15802, ¶ 82 & 15808, ¶ 91. See also Comments of Worldcom, Inc., CC Docket No. 01-337 (filed Mar. 1, 2002) at 3.

²³ Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (1992) ("*Horizontal Merger Guidelines*"). The Guidelines are available at

perspective of the consumer because the ability of a firm to exercise market power depends upon the likely demand response of the consumer to a price increase. Specifically, “[a] price increase could be made unprofitable by consumers either switching to other products or switching to the same product produced by firms at other locations. The nature and magnitude of these two types of demand responses respectively determine the scope of the product market and the geographic market.”²⁴

It bears noting that the Commission did not define “broadband services” as a product market in its *NPRM*. In the *ILEC Dominance NPRM*, however, the Commission stated its goal “to rigorously define the relevant markets so as to include all reasonably substitutable services,”²⁵ which should be equally applicable here. GCI applauds this goal because it implicitly recognizes two important facts: (1) it acknowledges that “broadband services” may encompass multiple product markets and, accordingly, a single definition of “broadband” for purposes of a market power analysis would not be appropriate; and (2) its emphasis on “substitutable services” places the focus on what is functionally interchangeable (“substitutable”) from the perspective of the relevant consumer group, which is consistent with the *Horizontal Merger Guidelines*.

In other dockets, ILECs have proposed that the Commission adopt a uniform definition of “broadband services.” Their proposed product definition is not derived from the consumer’s perspective, but rather is based upon the underlying technology or speed

http://www.usdoj.gov/utc/public/guidelines/horiz_book/11.html. The Commission explicitly aligned its analysis of product and geographic markets with that of the Department of Justice and the Federal Trade Commission in the *LEC Classification Order*. *LEC Classification Order* at 15774, ¶ 26.

²⁴ *Horizontal Merger Guidelines* at § 1.0.

²⁵ *ILEC Dominance NPRM* at ¶ 18.

of the transmission.²⁶ Yet to the consumer, the technology underlying the transmission of the communications is transparent. It is relevant to the extent – any *only* to the extent – that it allows for the offering of products with varying performance characteristics of import to the consumer. The speed of transmission is one such characteristic, but it is unlikely to be the sole characteristic defining a consumer’s product market for purposes of market power analysis.

The ILECs' assertions regarding product market definitions ignore the approach taken in the *Horizontal Merger Guidelines*. In those guidelines, the DOJ and the FTC explained:

Specifically, the Agency will begin with each product (narrowly defined) produced or sold by each merging firm and ask what would happen if a hypothetical monopolist of that product imposed at least a "small but significant and nontransitory" increase in price, but the terms of sale of all other products remained constant. If, in response to the price increase, the reduction in sales of the product would be large enough that a hypothetical monopolist would not find it profitable to impose such an increase in price, then the Agency will add to the product group the product that is the next-best substitute for the merging firm's product.²⁷

Moreover, the Guidelines further note that when buyers "differ significantly in their likelihood of switching to other products" in response to a small but significant and nontransitory" price increase, "[t]he Agency will consider additional relevant product markets consisting of a particular use or uses by groups of buyers of the product for

²⁶ Both SBC and Verizon would define a broadband service as a service that uses packet-switched (or successor) technology. Comments of Verizon, CC Docket No. 01-337 at 10; SBC Petition at 15-16, 18. Verizon would include an additional category of services with “the capability of transmitting information that is generally not less than 200 kbps in both directions.” Comments of Verizon, CC Docket No. 01-337 at 10.

²⁷ *Horizontal Merger Guidelines* at § 1.11.

which a hypothetical monopolist would profitably and separately impose at least a 'small but significant and nontransitory' increase in price."²⁸

1. *Small and Medium Size Enterprises Form a Distinct Product User Group*

When analysis of the proper definition of the product market is undertaken, it is apparent that the ILECs have vastly and self-servingly oversimplified the broadband product markets, ignoring distinct markets for services to many small and medium sized businesses. After proposing their overarching definition of “broadband services,” the ILECs find only two product markets for broadband services based on two defined user groups.

Piggy-backing on the FCC’s product market analyses of interLATA and local exchange and exchange access services, SBC describes a “mass market” consisting of residential and small business users, and a “larger business market” consisting of medium and large businesses. Verizon agrees with SBC and suggests the following distinctions between the two groups: mass market customers purchase from a more limited set of generic offerings and spend only a limited amount per month. Larger businesses, however, negotiate individualized contracts satisfying particular requirements and spend thousands of dollars per month. Verizon and SBC further indicate that mass market customers use xDSL and cable modem technologies, whereas the larger business segment relies upon Frame Relay, ATM and Gigabit Ethernet technologies.²⁹

GCI agrees with the Ad Hoc Telecommunications Users Group (Ad Hoc) that these definitions are dangerously simplistic, overlooking the distinct service needs of

²⁸ *Id.* at § 1.12

small and medium size enterprises (SMEs). Rather than the ILECs' clear demarcation between "mass" and "larger business" markets, consumer demand for broadband services is better drawn as a continuum from the residential to the small and home office to small and medium enterprises to large businesses.

Ad Hoc quite rightly explains that "smaller business locations should not be lumped together with residential customers simply because their geographical location or capacity requirements are the same *because they have very different broadband service needs.*"³⁰ The broadband DSL and cable modem service that residential subscribers most often take may not have the functionality or characteristics sought by many businesses – small or large. For example, though a small business may have lower capacity demand than a larger business, its need for security and reliability is not likely to be any less. Ad Hoc, a coalition of business users, indicates in its comments that the security level of a particular broadband service alone can be a "make or break" consideration for a business customer selecting a broadband service. And residential consumers may be able to tolerate occasional outages, whereas business users of any size generally require

²⁹ Comments of Verizon, CC Docket No. 01-337 at 11-12; Comments of SBC Communications, Inc., CC Docket No. 01-337 (filed Mar. 1, 2002) at 18-19.

³⁰ Comments of Ad Hoc Telecommunications Users Committee, CC Docket No. 01-337 (filed Mar. 1, 2002) at 7 (emphasis added). Ad Hoc also makes an important clarification that the Commission must take into account: "small businesses" in this context should refer to enterprises with less demand for broadband capacity, rather than enterprises employing fewer individuals. The *ILEC Dominance NPRM* indicates that SMEs are "typically defined as having between one and 500 employees," and SOHOs are "typically defined as businesses with fewer than five employees." *ILEC Dominance NPRM* at ¶ 23 nn. 57-58. Demand for broadband, of course, has nothing to do with the length of a businesses payroll. To the contrary, "the SME and SOHO designations should . . . be based upon the commercial activity being carried out at each such location and its relatively lower service capacity needs, regardless of the size of the customer . . . or the aggregate number of locations maintained on the customer's enterprise network." Comments of Ad Hoc, CC Docket No. 01-337 at 7.

continuous connectivity as part of their commercial activity. Accordingly, a cable modem service, which does not today have backup power in the event of a power outage, may not be suitable for a business reliant upon broadband access.³¹ Likewise, a business with less capacity may nonetheless require greater speed than the minimum guaranteed 1.5 mbps downstream/256 kbps upstream provided by GCI's cable modem service and generally acceptable to residential users. While cable modem service will be appropriate for some small and medium sized businesses, it will not be appropriate for many small and medium sized businesses, and those businesses will comprise a separate product market.

The flaw in the ILECs' reasoning is exposed simply by following the methodology in *Horizontal Merger Guidelines*. Starting with the ILEC's higher speed, symmetric-DSL services, for example, the question would be whether there are other alternatives in the market that would constrain a "small but significant and non-transitory" increase in price. Because the small businesses purchasing this product for higher symmetrical speeds would not shift to an asymmetric product in response to this price increase, the symmetric-DSL offering is in its own product market, separate from the asymmetric cable modem. Accordingly, GCI contends that there are at least three distinct broadband product groups from the consumer's perspective, and likely more.

2. *The Geographic Market for Any Relevant Broadband Service Product Market Is Point of Service*

The ILECs have also attempted to abstract and oversimplify the broadband geographic markets, claiming that the geographic market for broadband services is

³¹ GCI is currently working on an upgrade to its cable system that would allow 8 hours of standby power. That final solution, however, may be a year or more away.

national. This directly conflicts with Commission precedent. Specifically, in the *AOL-Time Warner Order*, the Commission found that the geographic market for some broadband services is local.³² And earlier, discussing LEC provision of interexchange service, the Commission observed that “long distance calling, at its most fundamental level, involves a customer making a connection from one specific location to another specific location.”³³ Broadband transmission, as well, involves a connection from one point to another. Explaining that a customer in Miami would not find long distance service originating in Los Angeles to be a substitute for service originating in his hometown, the Commission concluded that that market to purchase long distance service “is a localized one, not a national one.”³⁴ The same can be said of that customer in Miami seeking broadband service today.

The ILECs’ call for a national market is also inconsistent with the *Horizontal Merger Guidelines*. An application of the *Horizontal Merger Guidelines* demonstrates that the geographic market for broadband services is, unquestionably, local. Addressing the “likely demand response of consumers to a price increase,” the Commission must consider whether that price increase could be made unprofitable by consumers “switching to the same product produced by firms at other locations.”³⁵ If so, consumers would

³² *Application for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner, Inc., and America Online, Inc.*, Memorandum Opinion and Order, FCC 01-12, 16 FCC Rcd. 6547, 6578, ¶ 74 (2001).

³³ *LEC Classification Order* at 15793, ¶64.

³⁴ *Id.* at ¶ 65.

³⁵ *Horizontal Merger Guidelines* at § 1.0. In the *LEC Classification Order*, the Commission similarly explained: “With respect to the relevant geographic market, we must consider whether, if all carriers in a specified area raised the price of a particular service or group of services, customers would be able to switch to the same service offered at a lower price in a different area.” *LEC Classification Order* at 15773, ¶25.

defeat an attempt to exercise market power. In arguing for a national geographic market, the ILECs do not appear to suggest that a consumer seeking a broadband connection would simply move to another location in response to an exercise of market power. Rather, they argue that aggregation of the point-to-point markets into a single national market is appropriate because “customers in the various geographic markets face similar competitive choices.”³⁶ Indeed, SBC misinterprets Commission precedent with its interpretation that the Commission “will only assess competition in a particular market or group of markets if there is credible evidence that there is or could be a lack of competitive performance in such market(s).”³⁷ Such a move truly puts the cart before the horse: presumptively finding that local competitive conditions are meaningfully similar without actually analyzing those conditions on the local level. The ILECs ignore this jump in logic and suggest that the Commission’s decision to aggregate the local geographic markets for long distance services when assessing LEC market power should govern its decision here.

What the ILECs fail to disclose is that the Commission expressly found that aggregation was appropriate where the point-to-point markets “exhibit sufficiently similar competitive characteristics.”³⁸ In the context of long distance services, regulatory requirements such as geographic rate averaging and price regulation of exchange access services provided the Commission with sufficient assurance of such “similar competitive characteristics.” Because this is not the case with broadband services, aggregation of local geographic markets would have no legitimate basis. Indeed, *directly contrary* to

³⁶ Comments of Verizon, CC Docket No. 01-337 at 23.

³⁷ Comments of SBC, CC Docket No. 01-337 at 32.

³⁸ *LEC Classification Order* at 15794, ¶ 66.

ILECs' assertion that the Commission "will only assess competition in a particular market or group of markets if there is credible evidence that there is or could be a lack of competitive performance in such market(s),"³⁹ the Commission established a presumption *against aggregation* of local markets, indicating that aggregation "require[s] that there be *no credible evidence* that there is or could be a lack of competitive performance in any point-to-point market for that service."⁴⁰

This is equally true on a regional or MSA basis. Alternative broadband services in one part of a city are not substitutes for broadband services provided in a different part of the city. In the absence of regulation, nothing constrains the ILEC from price discriminating and charging a higher price to customers that have no alternative source for a desired product. Under the *Horizontal Merger Guidelines*, this constitutes a separate product market.⁴¹

B. Satellite and Wireless Do Not Constrain the ILEC's Ability to Exercise Market Power in Alaska

In the areas not served, as a practical matter, from GCI's fiber ring, there is no basis on which to conclude that satellite and wireless services would constrain the ILEC's ability to impose a "small but significant and non-transitory price increase" on those business customers for whom cable modem services are not an adequate substitute. Nor would those services protect businesses for whom cable modem services would be an adequate substitute, but that are not passed by the cable network.

³⁹ Comments of SBC, CC Docket No. 01-337 at 32.

⁴⁰ *LEC Classification Order* at 15794, ¶ 66 (emphasis added).

⁴¹ *Horizontal Merger Guidelines* at §1.22 ("The Agency will consider additional geographic markets consisting of particular locations of buyers for which a hypothetical monopolist would profitably and separately impose at least a 'small but significant and nontransitory' increase in price.")

Competitive service providers have considered, and tried, a variety of platforms that theoretically could be used to provide intermodal competition. GCI's problems with cable modem and direct fiber have been described above. And, while significant, GCI's unlicensed wireless Internet access services cannot provide service beyond the bush. In urban Alaska, not only is demand too high for economical use of a cellular-based architecture, but also an unlicensed system would receive no interference protection from licensed or other unlicensed services in a heavily-used RF environment. GCI's experiments with fixed wireless using PCS spectrum established that there remain significant technical and economic obstacles to a fixed wireless solution.⁴² Satellite services such as Starband have much higher initial fixed costs and monthly subscription fees, and would permit a large and non-transitory ILEC price increase, let alone a small one.⁴³

⁴² GCI deployed an experimental fixed wireless system in Anchorage in June 2000. As it conducted its deployment, it discovered several significant problems. First, the technology was not yet mature so the system was hampered both by a lack of features and, as features were added, by difficulties in upgrading network equipment because of the developmental changes. Second, when trees bloomed in the spring, transmission signals weakened. Although additional cell sites probably would have cured this problem, the economics of deployment limited that solution. In addition, both GCI and AT&T Wireless found that it is difficult to receive local approvals for cell towers in the Anchorage area. As such, fixed wireless appears to be better suited toward use as a pocket strategy to complement UNE-L deployment, rather than a ubiquitous wireline replacement technology.

⁴³ For example, for the continental U.S., Starband service requires (1) a one time equipment fee with a recommended retail price of \$499; (2) the cost of professional installation by a Starband certified installer; (3) a monthly service fee with packages starting at \$69.99; and (4) a minimum one year contract. See <http://www.starband.com>. The Starband website indicates that these recommended retail prices do not apply to Alaska, where a larger dish (1.2 meters instead of .75 meters), with a stronger low-noise block transmitter, is required. Installation costs are also greater in Alaska because roof and wall mounts must be able to withstand significant wind force. Starband advertises its service with "targeted minimum speeds in excess of 150 kbps." <http://www.starband.com/whatis/index.htm> (April 22,

Nor is there much likelihood that satellite or wireless could evolve as timely entrants to combat a “small, but significant, and non-transitory price increase.” Under the *Horizontal Merger Guidelines*, entry is timely if it would take less than two years from initial planning to market impact.⁴⁴ These technologies are still on the market fringe, and would likely take far more than two years to have a significant market impact.

C. In Alaska, Cable Modem and GCI’s Fiber Ring Do Not Constrain ILEC Market Power in Areas Not Passed or for Customers With Different Needs

Just as satellite and wireless are not an adequate substitute for ILEC bottleneck facilities, cable modem and competitive fiber facilities do not provide an intermodal substitute for ILEC bottleneck facilities in every geographic area or in every product market. For example, in Anchorage, 50% of businesses are not passed by cable, and only 20 buildings are served by GCI’s fiber loop. It is axiomatic that for those businesses not served by cable or GCI’s fiber loop, cable modem and GCI’s fiber loop would not constrain the ILEC’s ability to impose a “small but significant and non-transitory price increase”. To adopt the ILECs’ proposed national geographic market, however, the Commission would have to make a contrary finding and conclude that the businesses and residences served only by ILEC bottleneck facilities would indeed be able to switch to the same broadband products produced by firms at other locations, which of course, those businesses and residences could not do if the *Computer II* safeguards and unbundling of high capacity loops is eliminated.

2002). A telephone call to a Starband representative revealed that the equipment for Alaska costs approximately \$1,200, with an additional \$450 installation fee. The representative also indicated that transmission speeds are 600-900 kbps downstream and 90 kbps upstream.

⁴⁴ *Horizontal Merger Guidelines* at § 3.2.

Even in those areas served by cable modem, cable modem does not provide an adequate substitute in all product markets for broadband delivered over ILEC bottleneck facilities. As discussed above, cable modem services are not an adequate substitute for businesses that require a higher upstream capacity, a more reliable level of service or, at least with today's systems, back-up power. Customers who need these features are in a distinct product market that does not include cable modem service.

Ad Hoc's comments in response to the *ILEC Dominance NPRM* reflect GCI's situation in Anchorage and are particularly persuasive with respect to the absence of alternatives to the ILECs networks. Ad Hoc's members include the nation's largest and most sophisticated business users. Yet Ad Hoc's members "report that they face no competitive alternatives to ILEC services to meet their broadband business services requirements in the overwhelming majority of their service locales."⁴⁵ In particular, Ad Hoc emphasizes that cable modem service is not a source of intermodal competition for the great majority of business users.⁴⁶

Thus, when the product and geographic markets are properly defined, and even when a cable operator is offering cable modem services, there remain product and geographic markets in which the ILEC can exercise substantial market power.

D. Absence of TELRIC-Priced Unbundling for DSL-Qualified Loops or Other High Capacity Loops Would Permit ILECs to Exercise Market Power by Raising Rivals Costs

Even in the absence of intermodal competition to constrain a small but significant price increase for those business customers (1) that are not passed by GCI's cable system,

⁴⁵ Comments of Ad Hoc, CC Docket No. 01-337 at 14.

⁴⁶ *Id.* at 17.

and cannot, as a practical matter, be served from GCI's fiber loop, or (2) for whom cable modem services are an inadequate substitute, the Commission is threatening to eliminate intramodal competition, such as GCI's provision of service using its own electronics and an ILEC DSL-qualified loop. Until the FCC determines that UNE-loop and other elements will continue to be available, it cannot rely on intramodal competition to constrain a "small but significant and non-transitory increase in price," or provide all consumers with an alternative to ILEC services. In areas served only by ILEC transmission facilities, unless unbundling of DSL-qualified loops and other high capacity loops is preserved, the Commission's only means to ensure that ILECs do not leverage control of their bottleneck facilities into market power in information services will be to retain the *Computer II* safeguards.

Even if the Commission retains the requirement that ILECs unbundle DSL-qualified and other high capacity loops, as required by the Act, if it then allowed the ILEC to charge non-TELRIC-based rates for those facilities, it would give the ILECs the ability to reduce output by raising rivals costs. As this would constitute an exercise of market power, the *Computer II* safeguards may still be necessary to limit ILEC abuse of its control of bottleneck facilities.

E. ILECs Can Also Exercise Market Power by Reducing Rivals Output by Failing to Adequately and Timely Provision DSL-Qualified and Other High Capacity Loops

In addition, before the Commission can declare ILECs to be non-dominant in a relevant product and geographic market based on the presence of intramodal competition, the Commission must put in place adequate safeguards to ensure that the ILECs will provision the necessary unbundled elements in a timely and non-discriminatory fashion. In GCI's experience, there are many ways for an ILEC to increase the costs of a rival that

uses an unbundled network element. Some of these costs come from what are claimed to be "mistakes" in provisions. Some of these costs come from failure to provide loops in a timely manner, even when the State Commission has adopted a specific time requirement for provisioning.⁴⁷ These costs are both monetary (loss of revenues) and non-monetary (loss of consumer goodwill).

The largest ILEC in Alaska, which consists of the Alaska Communications Systems affiliated local exchange companies (collectively, ACS), has no incentive to provision unbundled elements in a timely and non-discriminatory manner. Every unbundled loop it provisions becomes a lost ACS customer. In Alaska, no protection is provided by the requirements of Section 271. ACS does not need to demonstrate non-discriminatory provisioning to be able to enter the long distance market -- it already provides long distance. The Commission must not allow a company such as ACS -- which is the fourth largest rate-of-return ILEC in the country -- to be declared non-dominant when it still blatantly has the power and incentive to restrict output and raise price by raising GCI's costs.

IV. The Existence of *Computer II* Safeguards Does Not Disincent Deployment Advanced Services by the ILECs

The Commission has appropriately positioned this proceeding in the context of its statutory mandate to "encourage the deployment . . . of advanced services capability to all

⁴⁷ The Regulatory Commission of Alaska requires that loop conversions be provisioned in 7 days, which Alaska ILECs routinely miss, and by a wide margin. For example, in December 2001 and January 2002, more than half of all loop requests were not provisioned within this 7-day period. *Nearly a quarter of the requests took more than 27 days.* These delays breed customer ill will and frequently lead to the cancellation of orders. Hitz Declaration at ¶¶ 14-15.

Americans.”⁴⁸ Above, GCI has established both that UNE unbundling is essential to GCI’s ability to offer broadband services in certain product and geographic markets and that certain markets cannot be declared non-dominant in the absence of unbundling of DSL-qualified and other high capacity loops. Moreover, by enabling GCI to provide service using its own electronics, unbundling of DSL-qualified and other high capacity loops promotes advanced services deployment. The Commission should not, however, be misled into thinking that because these market-opening tools promote competitive entry, they somehow disincent further deployment by the former monopolist service provider. Indeed, in Alaska’s experience, quite the opposite is true.

With current dominant carrier and unbundling requirements in place today, national broadband deployment is occurring at “an adoption speed that outstrips other technologies such as color television, cell phones, pagers, and VCRs.”⁴⁹ According to the *Third Advanced Services Report*, “industry investment in infrastructure to support high-speed and advanced services has increased dramatically since 1996,” spurred by competition in the marketplace and rapidly rising demand.⁵⁰ The Commission estimated that by the end of 2001, ADSL service—the most popular residential broadband offering

⁴⁸ 47 U.S.C. § 706(a).

⁴⁹ *A Nation Online: How Americans Are Expanding Their Use of the Internet*, Department of Commerce at 41 (2002).

⁵⁰ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, FCC 02-33 at ¶¶ 62-63 (rel. Feb. 6, 2002) (“*Third Advanced Services Report*”).

over ILEC facilities—was available to about 45% of U.S. homes, compared to about 25% of homes as of the end of 1999.⁵¹

In Alaska, the largest ILEC, ACS, has sought rate increases from the state commission, premised upon a complete upgrade of its switching network statewide within approximately 3 to 5 years to substitute ATM packet switching for circuit switching technology. GCI's ability to provide a suite of advanced services over its cable modem services and, in areas not served by cable facilities, its DSL-qualified UNE loops combined with GCI's own facilities, places competitive pressure on ACS to continue to upgrade its own offerings.⁵² This is exactly how competition is supposed to work. Notably, there is no caveat in that rate case that these upgrades will occur only if dominant carrier and unbundling requirements are lifted. In fact, the Chief Operating Officer of ACS testified that such an exemption from unbundling was not a condition of its upgrades.⁵³

⁵¹ *Id.* at ¶ 48, 51.

⁵² Hitz Declaration at ¶30.

⁵³ During the hearing on ACS's request for rate modifications related to its upgrade plans, the following exchange occurred between Regulatory Commission of Alaska Chair Nanette Thompson, and ACS's Chief Operating Officer Wesley Carson:

Q. (Chair Thompson): An argument that's been voiced in the Lower 48 when incumbents are talking about transition to markets is that the incumbents won't have any incentive to invest in new technology or anything that will deliver broadband services until they've some how been assured that they won't have to resell that network to competitors. I'm -- I wonder whether that argument's going to be raised here or how that fits into ACS' business plan? The network you've outlined for us is a Packet switch network that would allow transmission of high-speed data. Are ACS' plans to invest in that network tied to a requirement that it gets some kind of assurance that they're not going to have to make that network open?

A. (Mr. Carson): They are not tied to that kind of assurance.

This competitive response – investment in and improvement of its facilities and services – has been the ILEC’s standard response to competitive entry and investment by GCI. Throughout, Alaskans have benefited. For example, in Fairbanks, ACS began offering PRI ISDN service and digital subscriber service -- both of which it had never offered before -- once it learned GCI would enter the market. ACS also began to offer discount packages and bundles to business and residential customers, and to market and promote its additional offerings, such as vertical features.⁵⁴ And, of course, consumers have benefited from lower prices⁵⁵ and improved customer service.⁵⁶

ILECs may claim they will not invest in broadband last-mile facilities in the future if broadband facilities remain unbundled, but carrying out this threat would be irrational and contrary to their interests. In areas where GCI offers a competitive service over its own facilities with which the ILEC must compete, the ILEC must invest in order to be able to offer its own competitive service. In areas in which the ILEC continues to be the only facilities provider, either because of differences in the product market or because alternatives are not available in that geographic market, ILECs will invest

Hearing of the Regulatory Commission of Alaska, Docket Nos. U-01-34, U-01-82 through U-01-87, U-01-66 (Mar. 6, 2002).

⁵⁴ Hitz Declaration at ¶ 27.

⁵⁵ Since GCI entered the market in 1997, the price of the most commonly purchased local service package in Anchorage has dropped 26%. GCI was able to construct a highly attractive package of local service and vertical features that overcame problems created by below-cost ILEC local service rates, and GCI offered that package at a substantial discount. More recently, when ACS raised its rates in Anchorage by 24%, GCI held the line on its rates, even though its own cost for UNE loops had also increased. Hitz Declaration at ¶ 29.

because they have the technological lead in that area or product market. The investment in facilities that has already been made provides ILECs with an incentive to continue to make incremental upgrades, regardless of dominant carrier and unbundling requirements.

V. Conclusion

The ILECs would have the Commission conclude that there are two markets for broadband services: a single national mass market, and a single national larger business market. By inappropriately aggregating markets -- glossing over striking variations in demand in residential and business markets, and disparities among platforms reaching urban, suburban and rural areas -- they would have the Commission believe that broadband markets -- including the markets for underlying facilities -- are fully competitive today with widespread intermodal competition. That is simply not the case. Even a basic competition analysis consistent with Commission precedent shows that ILECs retain significant market power derived from their control of bottleneck facilities in many relevant geographic and product markets. This control is not the product of their superior foresight or ingenuity, but of the historical local telecommunications service monopoly.

While ILECs retain significant market power, the *Computer II* safeguards remain appropriate to prevent ILECs from leveraging their control of ubiquitous bottleneck facilities into other markets. At a minimum, if the Commission is going to eliminate the *Computer II* safeguards, it must retain access to DSL-qualified, and other high-capacity, loops. There are substantial areas -- including half of the businesses in Anchorage --

⁵⁶ For example, once GCI entered the Anchorage market, ACS started doing business cutovers and installations at night, rather than during the business day, and it extended the hours of its customer service operations. Hitz Declaration at ¶ 27.

which will otherwise have no choice among providers of high-speed telecommunications and information services.

Respectfully submitted,

By: _____ /s/

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May 3, 2002

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers)	CC Docket 01-338
)	
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996)	CC Docket 96-98
)	
Deployment of Wireline Services Offering Advanced Telecommunications Capability)	CC Docket 98-147

DECLARATION OF FREDERICK W. HITZ, III

I, Frederick W. Hitz, III, pursuant to 28 U.S.C. § 1746, do hereby declare under penalty of perjury that the following is true and correct:

1. This declaration is made on behalf of General Communication, Inc. (GCI), in support of its comments in the Commission's Notice of Proposed Rulemaking regarding its review of the Section 251 unbundling obligations of the incumbent LECs.
2. I am GCI's Director of Rates and Tariffs. As part of my responsibilities as Director of Rates and Tariffs, I have knowledge of the services currently provided by GCI, as well as its plans for expansion. I am also familiar with the services and facilities provided by Alaska's largest dominant incumbent local exchange carrier (ILEC or incumbent LEC), Alaska Communications Systems (ACS), which serves Alaska's largest three cities, Anchorage, Fairbanks, and Juneau, in addition to other parts of Alaska.
3. GCI is an Alaska-based company providing competitive local and long distance voice, video, and data communications services to residential, commercial, and government customers. GCI provides local services today in Anchorage, Fairbanks and Juneau, and some adjacent areas. GCI provides long-distance service throughout much of Alaska, and between Alaska and the rest of the world. GCI also provides Internet services throughout much of Alaska. GCI has invested over \$750 million in integrated communications assets during the last ten years in serving some of the most rural markets in the United States.

4. In Anchorage, GCI currently provides local services using predominantly a UNE-Loop and its own switch to provide local exchange services, and self-provisions both switching and transport where possible. In Fairbanks and Juneau, GCI has acquired switches and is constructing collocation facilities. GCI has already begun to cutover customers in Fairbanks currently served by Section 251(c)(4) resale to GCI's UNE-L arrangement.
5. Across all its local operations, GCI provides service to approximately 25% of its lines wholly over its own facilities, including customers who are collocated with GCI. GCI provides nearly two-thirds of its service using a single switch in each service area, its own transport facilities, and the ILEC loop forming a portion of GCI's UNE-L loop facilities. GCI provides its own multiplexing and transport facilities to transport calls from the collocation cage in the ILEC central office to its own switching center, where the call is then switched and placed on other transport facilities for delivery. The remainder of GCI's lines are served today through Section 251(c)(4) resale arrangements.
6. GCI self-provisions facilities whenever feasible. As discussed further in paragraphs 14 to 15, below, GCI suffers extensive service delays, discrimination and customer aggravation caused by the incumbent LEC failing to provision services, particularly unbundled loops, in a timely manner. In addition, so long as GCI is leasing UNEs from an unwilling seller such as ACS, the transaction costs of constantly litigating the availability and the price of necessary inputs and regulatory uncertainty as to whether unbundled network elements will continue to be available create a substantial incentive for GCI to find and use a more secure and guaranteed source of supply of network functionalities than the ILEC. Indeed, it was in part for this reason that GCI purchased cable companies in 1997. These hidden costs of UNE-based entry far outweigh any simplistic calculation of UNE rates versus capital investment costs when GCI is evaluating where and when to invest in new facilities.
7. In areas served by its cable network, including the residential portions of Anchorage, Fairbanks, and Juneau, GCI plans to migrate its local exchange services to cable. GCI plans to begin testing a cable-based telephone system this year, and is currently making network design decisions with respect to issues such as back-up power and other technical issues.
8. Without access to unbundled loops, GCI would not be able today to serve at least two-thirds of its customers. There is no alternative means of connecting these customers to GCI's switch that can be deployed in a timely manner. All other means of connecting these customers to GCI's switch would involve substantial investment over substantial time. Although GCI eventually plans to provide telephony service over its cable network, its cable networks currently are not capable of providing telephony service.

9. Moreover, even when cable telephony is deployed fully, it will not reach all homes and businesses within GCI's service area. In Anchorage, only about half of GCI's potential business customers are passed by its cable facilities, and 95% of potential residential customers. The remaining customers would have to be served by some other means.
10. GCI's fiber loop in Anchorage passes some of the business customers not passed by cable, but does not pass all of the 50% of businesses not passed by GCI's cable network. Problems with building access, particularly access to riser conduits within the building, make it uneconomic for GCI to add customers for service over its fiber facilities. In addition, expanding the scope of the fiber loop would require extensive digging because much of the street conduit in Anchorage is now full.
11. GCI's fixed wireless assets do not yet appear to be a ubiquitous alternative to the local telephone loop. Deployment of GCI's experimental fixed wireless system in Anchorage raised several problematic issues. First, the technology was not yet mature so the system was hampered both by a lack of features and, as features were added, by difficulties in upgrading network equipment because of the developmental changes. Second, when trees bloomed the transmission signals weakened. Although additional cell sites may have cured this problem, the economics of deployment limited that potential solution. In addition, it is difficult to receive local approvals for cell towers in the Anchorage area.
12. Resale under Section 251(c)(4) is not an adequate alternative to UNE-based entry. Although GCI uses resale where it must do so to get service installed today, resale suffers from many drawbacks. Significantly, resale restricts GCI to offering the services the ILEC seeks to offer, in the manner defined by the ILEC and at the ILEC's level of service quality. UNE-based entry, whether using GCI's own facilities in combination with ILEC UNEs or using all ILEC UNEs in pre-existing combinations, allows GCI to offer the services it seeks to offer, and innovate with respect to the services it provides.
13. Thus, even after it deploys cable telephony, GCI would be unable to offer the services it seeks to offer to some of its customers in the absence of access to UNE loops provided by the ILEC.
14. In addition, GCI has had continual problems with provisioning unbundled loops. Initially, in Anchorage, GCI suffered from backlogs of 3 to 6 months in loop cutovers. At one point, backlogs became so severe that GCI negotiated to pay the costs for ATU, then the incumbent LEC in Anchorage, to hire 25 additional workers to increase the volume of "hot-cuts," at a cost of over \$3 million per year. These delays in provisioning unbundled loops were so persistent and prolonged, GCI resorted to holding a monthly drawing of a trip to Hawaii for its customers stranded on the waiting list so that they would not cancel their orders. GCI's objective was to reach 500 hot cuts per day, but at its peak, ATU averaged only

approximately 100 hot cuts per day in Anchorage. This problem has not been solved. In Fairbanks, GCI is phasing in its residential service offerings by zip code in order to manage customer expectations regarding provisioning of service. GCI would prefer to launch its residential service in Fairbanks area-wide, but cannot due to the ILEC's self-imposed hot cut capacity.

15. In addition to cutover delays for new customers, GCI is experiencing significant delays in provisioning of unbundled loops when existing customers seek to add new lines, or when an existing customer moves and needs her GCI service moved to her new address. In December 2001 and January 2002, 58% of unbundled loops were not provisioned within the seven days required under state regulations. During this two-month period, nearly a quarter of these loops were not provisioned within 27 days of the request, and many took much longer. Nineteen customers have cancelled GCI orders for service since January 1, 2002 because of these provisioning delays. In a number of cases, many of which occurred when a customer moved, the customer reported that she switched to ACS because ACS could provision its own service much more quickly.
16. With respect to advanced services, GCI is currently rolling out cable modem services in all areas where it provides cable service, and it expects to offer cable modem service to virtually all homes passed by the end of 2002. These services have a maximum speed of 1.5 mbps downstream and 256 kbps upstream. However, there will be a significant number of businesses that are not passed by GCI's cable plant, as well as some homes. In addition, many business customers require greater upload and/or download speeds than can be provided over cable modem service, and many also require greater back-up power than can be provided over a cable system today. For these customers, cable modem service is not within the alternatives they will consider.
17. GCI is also currently introducing high speed Internet access to Alaska's rural Bush areas using unlicensed wireless (802.11) technology interconnected to satellite backhaul. GCI anticipates that it will offer this high speed Internet access to all Bush locations it currently serves by 2004. This technology is particularly well suited to deployment in the Alaska bush where there are small, relatively dense and geographically contained communities that can be served from a single transmitter. It would not be as well suited to an urban environment, which would require multiple antennas and have a heavier demand.
18. In some cases, GCI can offer businesses not passed by its cable plant service from its fiber loop. However, as noted in paragraph 10, above, there are substantial barriers to GCI doing so.
19. More frequently, GCI today offers high capacity services to business using DSL-qualified ILEC UNE loops in combination with GCI's electronics. GCI has no other means to provide these high capacity services to these customers, and thus

would be severely impaired in its ability to offer high capacity services to these customers in the absence of access to a DSL-qualified loop.

20. In many areas, GCI cannot even get access to the unbundled loop in the ILEC central office prior to the time that loop enters the ILEC switch. Although ACS' new Integrated Digital Loop Carriers (IDLCs) implement GR-303, ACS operates a number of older IDLCs that do not use GR-303 and thus do not allow separation of the multiplexed loop from other loops prior to entering the switch. Other network architectures also preclude access to unbundled loops in the central office. These loops enter either the host or principal remote site from remote loop concentrator modules. These architectures prevent GCI from accessing the loop in order to direct traffic to its collocation space. GCI is therefore limited to using UNE loop and switching in combination or Section 251(c)(4) resale to offer competing telecommunications services in areas using IDLC loops that do not implement GR-303. As discussed in paragraph 12, above, Section 251(c)(4) resale does not allow GCI to offer the services it seeks to provide, but limits GCI to the ILEC's service offerings.
21. The cumulative result of these network configurations on access to unbundled loops is significant. In Fairbanks, GCI cannot access unbundled loops for almost 25% of its line services. In Juneau, GCI lacks access to unbundled loops for approximately 52% of its lines.
22. Collocation at the subloop level on otherwise inaccessible IDLC or remote concentrator loops is not possible in most cases. In some cases, access to the subloop distribution plant is not technically feasible, especially with respect to many remote loop concentrators. Even where it is technically feasible, in many cases it is economically infeasible, as the costs of replicating the feeder subloop or of leasing a dedicated trunk from the ILEC to the remote switch, IDLC or loop concentrator module are substantial.
23. ACS is also increasingly substituting remotes for switches. The use of remotes eliminates GCI's ability to interconnect fiber transport facilities on the trunk side of the switch to carry access traffic originating from ACS local customers for whom GCI is the long distance carrier. When GCI cannot carry this access traffic between the remote and GCI's interexchange point of presence, thereby avoiding ILEC charges for switched transport, GCI is deprived of potential economies of scale and scope in installing transport facilities that are necessary to carry GCI's own local exchange and exchange access traffic from the interconnected loop to GCI's switching center. In particular, GCI loses the savings that it would gain by carrying its access traffic itself and not having to pay transport charges to the incumbent LEC.
24. ACS, for example, has substituted a remote for an end office switch in its North Pole exchange. Expanded interconnection for access traffic from ACS local customers in the North Pole exchange can now only be obtained at the trunk side

- of the ACS host switch in Fairbanks, and can no longer be obtained at the North Pole switch. This means that GCI must now pay ACS for common transport from the North Pole to Fairbanks, even though GCI has its fiber facilities in North Pole that would be capable of carrying that traffic from North Pole to Fairbanks. This is particularly egregious since the North Pole and Fairbanks exchanges are held by different ACS corporate subsidiaries.
25. GCI also requires access to unbundled interoffice transmission in order to serve these lines for which there is no access to unbundled loops in the central office. Where the ILEC has deployed smart remotes, GCI must use unbundled ILEC interoffice transmission to reach the ILEC central office where it can interconnect.
 26. GCI may also need access to unbundled interoffice transmission when it enters areas in the Alaska bush. In these very small communities, there is usually only one switching center often serving only at most a few hundred lines. Despite the small size, GCI may be able to install its own switch to connect to UNE loops. GCI would, however, need to be able to connect its switch to its earth station. In such small communities, it is not likely to be economical for GCI to install its own fiber facilities. In these situations, GCI would be significantly and materially impaired in offering its own service if it had to install its own transport facilities when there is likely to be little demand.
 27. The competition resulting from GCI's market entry has produced significant benefits for Alaskan consumers. The ILEC's customer service has improved as a competitive response to GCI. In Anchorage, ACS started doing business cutovers and installations at night, rather than during the business day, and extended the hours of its customer service operations. In Fairbanks, ACS began offering PRI ISDN service and digital subscriber service -- both of which it had never offered before -- once it learned GCI would enter Fairbanks. ACS also began to offer discount packages and bundles to business and residential customers, and to market and promote its additional offerings, such as vertical features.
 28. GCI's entry into the market dramatically improved long distance services in Alaska. When GCI first entered the market, virtually all long distance calls were analog satellite transmission and used rather crude echo suppressors. GCI immediately introduced digital satellite transmission and echo cancellation, while reducing prices. Most calls within Alaska itself required a satellite "double-hop" to move the call from the remote origination location to a switching hub, and then from the switching hub to its destination elsewhere in Alaska. After intrastate competition was approved in 1991, GCI introduced demand assigned multiple access (DAMA) technology that eliminated the second hop, vastly improving service quality within Alaska. As GCI expanded its competitive footprint, its competitor responded by upgrading its own facilities and reducing prices. Today, a caller anywhere in Alaska can call nearly anywhere else in Alaska with a clear, high-quality call at low prices, or they can be connected directly to the rest of the United States or the rest of the world, using fiber optic cable.

29. Competition between GCI and ACS has lowered prices. Since GCI entered the market in 1997, the most commonly purchased local service package in Anchorage has dropped 26%. GCI was able to construct a highly attractive package of local service and vertical features that overcame problems created by below-cost local service rates, and offer that package at a substantial discount. More recently, when ACS raised its rates in Anchorage by 24%, GCI held the line on its rates (even though UNE loop rates had also increased). GCI's UNE-L based competitive offerings are disciplining ACS' rate increases in the marketplace, as would services using UNE-P. Had GCI been providing service using wholesale resale service under 251(c)(4), however, GCI would not have been able to exert this price discipline on the incumbent LEC's monopoly pricing power. AT&T was forced to raise its retail rates because it was offering service using Section 251(c)(4) resale, and thus experienced a 24% increase in its wholesale rate when ACS raised prices.
30. Advanced services are also benefiting from GCI's competitive pressure. ACS now states that it plans to upgrade its network over the next 3 to 5 years, completely replacing circuit switches with ATM-packet switches. GCI's ability to provide a suite of advanced services both over its cable modem services and, in areas not served by cable facilities, over DSL-qualified UNE loops combined with GCI's own facilities, places competitive pressure on ACS to continue to upgrade its own offerings.

Executed on April 5, 2002, by:


Frederick W. Hitz, III