

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Inquiry Regarding Carrier Current Systems,)	ET Docket No. 03-104
including Broadband over Power Line Systems)	
)	
)	

REPLY COMMENTS OF AT&T CORP.

AT&T Corp. (“AT&T”) submits these reply comments in response to the comments filed by Qwest Communications International Inc. (“Qwest”) and Verizon regarding the Notice of Inquiry (“NOI”) in the above-entitled proceeding released April 28, 2003.

As a competitive local exchange company, a provider of broadband services, a communications networking company, and an entity seeking to develop alternatives to the existing Bell monopolies in order to reach and serve customers, AT&T hopes that broadband over power line (“BPL”) systems will ultimately “play an important role in providing additional competition in the offering of broadband infrastructure to the American home and consumers,” (NOI, ¶ 1), and AT&T commends the Commission for its efforts to make this promise a reality.

As Commissioner Adelstein noted in his separate statement, “the NOI was drafted with the sole focus of addressing the technical issues associated with BPL systems, *not* the policy ones.” Emphasis added. Yet, Qwest and Verizon have chosen to use this technical proceeding to claim that the “advent” of BPL – which the Southern companies¹ state will not be ready for prime time until 2006 at the earliest – justifies the immediate

¹ Southern LINC, Southern Telecom, Inc., and Southern Company Services, Inc.

deregulation of the Bells' broadband telecommunications services. AT&T's reply rebuts the Bells' preposterous assertion that competition that may be introduced three years from now justifies deregulation today.

I. THE BELLS ENJOY MARKET POWER IN THE PROVISION OF BROADBAND SERVICES.

As the Commission has recognized, the deployment of broadband capabilities has been uneven across the United States. In many places residential consumers have access only to Bell-company provided DSL services. For example, in California, "SBC, and other incumbent LECs, continue to be the sole providers of broadband transmission service to nearly half of all residential customers in the state who have access to broadband service."² Moreover, satellite and wireless do not provide a viable broadband option. As EarthLink has reported, satellite broadband services "are useful only as a last resort for the rare end user willing to endure the quality and price drawbacks."³ In addition, fixed wireless services "are not now, nor will they be in the foreseeable future, viable alternatives" to incumbent LEC DSL service.⁴

As spotty as the availability of competitive alternatives is at the retail level, it is virtually non-existent at the wholesale level, where ISPs have no real alternative to the Bells. Data LECs ("DLECs"), satellite, terrestrial wireless, power line communications, and cable transmission do not currently offer – and will not offer within the foreseeable

² Reply Comments of the People of the State of California and the California Public Utilities Commission, filed July 1, 2002 in CC Docket. No. 02-33, at 2.

³ Letter from Kenneth R. Boley on behalf of EarthLink, dated April 29, 2003, to Marlene Dortch, FCC, in CC Docket Nos. 02-33, 01-337 ("EarthLink 4/29/03 *ex parte*"), at 7.

⁴ *Id.* at 8.

future – common carriage alternatives for wholesale broadband transmission.⁵ Even in areas where a few DLECs, primarily Covad, offer DSL, they do not have “the capacity or even the geographic coverage to function as a substantial alternative to the ubiquity of the BOC DSL offerings.”⁶ As of December 31, 2002, only five percent of ADSL arrangements were provided by DLECs.⁷ Cable modem service likewise does not provide a viable wholesale alternative to ISPs. Even EarthLink, which has been the most successful in obtaining wholesale cable access, has only been able to obtain access to one cable network and two cities on another network, covering only about 20-25% of the cable market nationwide.⁸

The Bells’ market dominance is even more pronounced in the small business segment. Cable companies do not even provide the type of voice and high-speed data access that competing carriers require, and in all events do not have facilities that actually connect to most small businesses. Indeed, for 76% of small businesses, the incumbent LEC faces no significant competition in the provision of broadband services.⁹ And, analysts’ “research suggests that DSL services will continue to outstrip cable to become the undisputed leader in adoption among main office locations in smaller firms.”¹⁰

⁵ *Id.* at 5-9.

⁶ *Id.* at 5.

⁷ Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, “High-Speed Services for Internet Access, Status as of December 31, 2002” (rel. Jun. 10, 2003) (“*High-Speed Data Report*”) at 3.

⁸ EarthLink 4/29/03 *ex parte*, at 8.

⁹ Only 2.5 million of an estimated 10.5 million small and medium businesses are passed by cable infrastructure today. *Ex parte* letter of Edward Shakin, Verizon, submitted in CC Docket No. 02-33 on January 15, 2003, at 3.

¹⁰ In-Stat/MDR, *All Access: Internet Access in the Small Business Market*, at 13 (Nov. 2002). With respect to those small businesses with 100-999 employees, the Bells’ dominance is even more apparent. For this market segment, DSL serves 55 times the number of subscribers in main

The Bells also continue to exercise market power over broadband services to large businesses through their bottleneck control of special access services. Although AT&T and other competitive carriers would prefer to self-provide these last-mile facilities, the sad reality is that the Bells and other ILECs remain the only source for these facilities in the overwhelming majority of situations. Indeed, AT&T “has a theoretically available, facilities-based alternative [to ILEC special access] in only about five percent of the buildings in which AT&T purchases special access.”¹¹ The remainder is provided almost exclusively through the use of ILEC facilities.

The Bells have used their control over special access to reap monopoly rents, put competitors in a price squeeze, and foreclose competitive broadband offerings. Where the Commission has mistakenly granted the Bells special access pricing relief, they have responded by increasing – rather than decreasing – their rates for special access, which by itself refutes any claim that a competitive market exists for this last-mile access. Indeed, a study filed with the Commission on June 12, 2003, concludes that the Bells are reaping at least \$5.6 billion in windfall profits annually through this last-mile monopoly.¹²

The Bells’ control over this essential input has enabled the Bells to dominate local data markets and, as they begin to capitalize on their new-found long distance authority, they will be able to leverage this market power outside their local monopolies as well.¹³

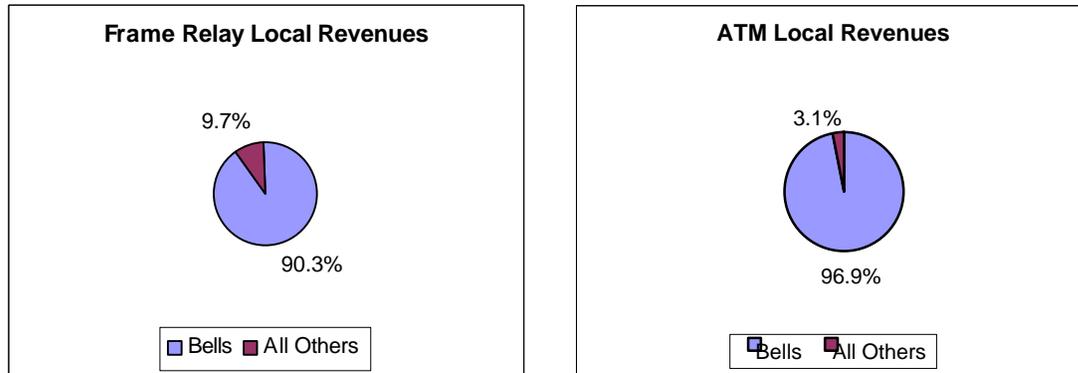
offices (a 98% share) and 12 times the number for branch offices (a 92% share). In-Stat/MDR, *The Data Nation: Demand for Broadband and Data Services in the Middle Market*, at 24-25 (Oct. 2002).

¹¹ AT&T Corp., Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, RM 10593 (filed Oct. 15, 2002) (“Special Access Petition”) at 28.

¹² See Rappoport, Taylor, Menko, Brand, *Macroeconomic Benefits from a Reduction in Special Access Price* (Jun. 12, 2003), filed in RM Docket No. 10593, at 5.

¹³ As the Bells have shown with respect to long distance generally, their control of the local

Information that Qwest submitted to the Commission shows that the Bells account for 90.3% of frame relay services local revenues, and that no non-Bell accounts for more than 3% of such revenues.¹⁴ The competitive picture is even bleaker with respect to ATM services. There, the Bells account for almost 97% of ATM local revenues.¹⁵



Source: Qwest *Ex Parte* at 14-15.

II. THE POTENTIAL OF COMMERCIAL BPL SERVICES THREE YEARS FROM NOW DOES NOT JUSTIFY DEREGULATION TODAY.

Despite the market power they possess in the residential, small business and large business broadband arenas, Qwest and Verizon both contend that the potential roll-out of BPL service at some future point justifies immediate deregulation of their broadband services today. This position is absurd. As Qwest itself has noted elsewhere, the Commission cannot base regulatory decisions “today” on “what might theoretically

bottleneck permits them to grow share rapidly in the interLATA arena. Indeed, SBC has advised investors that it has achieved “near 50 percent” penetration of the consumer long distance market in its Southwestern territories, and that it expects to achieve market shares in all its section 271 jurisdictions similar to the 60 percent market share it has obtained in Connecticut. Statement of Edward Whitacre, CEO, SBC Communications, Transcript, April 24, 2003 Conference Call Addressing First Quarter 2003 Earnings.

¹⁴ Qwest *Ex Parte* at 15.

¹⁵ *Id.* at 16.

happen in the next several years.”¹⁶ Moreover, the Bells’ position ignores the fact that – even if the technical issues attendant to BPL deployment were resolved overnight – true commercial deployment of BPL will not occur until 2006 at the earliest. Further, Qwest’s and Verizon’s position is particularly disingenuous because they each object to BPL deployment unless and until BPL proponents demonstrate that all interference and safety concerns have been resolved.

Qwest’s position is especially incongruous. On the one hand, Qwest properly asks the Commission to ensure that BPL providers – new entrants with zero market share in broadband – do not leverage their monopolies in the provision of electric power to improperly benefit their affiliated BPL service providers. Yet, Qwest would have the Commission eliminate precisely this type of protective regulation with respect to Qwest’s own broadband services. The inconsistency in Qwest’s arguments could hardly be clearer.

Although it cites the “advent” of BPL as justification for deregulating its broadband services, Qwest asks the Commission to preclude the provision of BPL service “to ‘live’ customers,” unless and until BPL providers address and resolve “*all* potential safety and technical issues.”¹⁷ For example, Qwest states (at 4) that the proximity of telephone lines at a customer’s premises to electrical wiring could give rise to crosstalk or other interference. Moreover, to the extent BPL interconnects with the telephone network, Qwest wants BPL providers to be required to “demonstrate that this interconnection will not endanger ILEC services, facilities, or technicians.” *Id.* at 3.

¹⁶ Qwest Reply Comments, CC Docket No. 01-337, filed Apr. 22, 2002, at 15.

¹⁷ Qwest at 1 (emphasis added).

Qwest therefore requests (at 1) that the Commission require that BPL proponents demonstrate “that they will not interfere with existing services and will not raise safety concerns, either for customers or for service technicians.”

Verizon similarly raises concerns (at 4) regarding interference that may “leak” from power cables or be “inducted” into telecommunications outside plant and customer premises cabling and equipment. Verizon also contends that BPL may potentially interfere with existing voice and DSL service, as well as with VDSL. *Id.* at 4-5. Verizon therefore insists that the Commission fully understand the interference aspects of BPL before revising its Part 15 rules, which – according to Verizon – the Commission will not be in a position to do until industry standards have been established.¹⁸ However, as the Southern companies observe (at 14-15), “little incentive exists among the technology companies to agree on a common standard until there has been a further ‘shake-out’ among technology companies in this sector or until the utilities begin to rally around a single technology. Neither scenario appears likely in the near term.”

In fact, the comments demonstrate the significant disagreement in the industry regarding the potential that BPL will cause harmful interference. For example, amateur radio operators,¹⁹ television broadcasters,²⁰ providers of information technology products and services,²¹ radio astronomers,²² short wave broadcasters and users,²³ public safety

¹⁸ *Id.* at 6.

¹⁹ Amateur Radio Research and Development Corp. (AMRAD) at 1-2; National Association for Amateur Radio (ARRL) at 2 (BPL has a “severe interference potential” and is “a Pandora’s Box of unprecedented proportions”).

²⁰ Association for Maximum Service Television (MSTV) and National Association of Broadcasters (NAB) at 2 (BPL poses a “serious risk of interference” to TV channels 2-5).

²¹ Information Technology Industry Council (ITI) at 3 (recommends that BPL be limited to “truly rural and isolated areas” where other services do not exist or will not exist in the near future).

agencies,²⁴ and wireless broadband providers²⁵ express concern regarding potential interference with existing authorized uses of spectrum. On the other hand, current and future providers of BPL equipment and services contend that BPL poses no significant risk of interference and that the existing Part 15 rules adequately protect existing spectrum users.²⁶ Resolution of these interference issues will, at a minimum, take time and effort. Indeed, according to ITI (at 7), the European Union has not gone forward with any significant deployment of BPL because of its concern over harmful interference.²⁷

²² National Academy of Sciences Committee on Radio Frequencies (CORF) at 1-2 (radio astronomy facilities are particularly vulnerable to interference from in-band emissions, spurious and out-of-band emissions, and transmissions that produce harmonic emissions that fall into the radio astronomy bands).

²³ National Association of Short Wave Broadcasters (NASB) at 1 (BPL is a disruptive technology that significantly interferes with many existing radio applications and should not be authorized); North American Shortwave Association (NASWA) (BPL devices using HF frequencies “are incompatible with international broadcast reception in the International Telecommunications Union (ITU)-allocated spectrum between 2 and 26 MHz”).

²⁴ Public Safety Wireless Network (PSWN) Program at 4, 6 (Research indicates BPL would interfere with HF users. Commission should refrain from permitting BPL deployment until it and NTIA can examine test data and perform their own analyses).

²⁵ Wireless Communications Association International, Inc. (WCA) at 2.

²⁶ *See, e.g.*, Ambient Corp. at 5 (existing Part 15 rules could be relaxed so that BPL could match or exceed speed available via cable and DSL); Amperion, Inc. at 5 (BPL equipment complies with existing Part 15 emission rules); Current Technologies, Inc. at 2 (the power line does not act like an antenna and BPL signals do not propagate well); Electric Broadband at 3 (BPL devices that comply with existing Part 15 rules will not cause harmful interference); HomePlug Powerline Alliance at 1 (Part 15 has proven effective, and there is no need for additional or changed rules); Main.net Communications Ltd. at 6 (has experienced no interference issues with ADSL or cable service); PowerWAN, Inc. at 7-8 (existing Part 15 rules are adequate); PPL Telecom, LLC (BPL is safe, will comply with Part 15, and will not interfere with licensed users); Progress Energy, Inc. at 5 (no known incidents of interference); Southern Companies at 18 (existing Part 15 rules impose “significant limitations intended to protect licensed users of the spectrum”); United Power Line Council (UPLC) at 10 (BPL systems comply with Part 15 limits, which protect against interference).

²⁷ *But see* Ameren Energy Communications at 5 (power line communications systems have been deployed in Germany, Spain, France, Sweden, Switzerland, Iceland, Chile, Turkey, Australia, Brazil, and Japan).

But even if there were no interference concerns, the Southern companies – which together constitute a principal potential deployer of BPL – state that commercial deployment of BPL will not commence until 2005, and, even then, BPL will generally be offered on a very limited basis. True “commercial deployment” will not occur until (1) BPL technology and back office systems have been perfected, (2) demand for the service exists, and (3) the industry adopts a single technology, which the Southern companies do not believe is likely in the near term.

Finally, Qwest’s own comments confirm that the Commission should retain regulations necessary to protect against a monopolist’s ability to leverage its monopoly in its principal market into the broadband arena. Qwest stresses (at 4-5) that, although – as new entrants – BPL providers will lack “immediate market power” in the broadband market, electric utilities “have a monopoly in their principal business, the distribution of electric power,” which, in turn, “creates the potential for leveraging of that monopoly to benefit BPL service.” Qwest thus urges that the Commission “take steps to ensure that BPL providers do not improperly leverage their monopoly over the distribution of electric power,” including “implementing accounting controls” to ensure there is no improper cross-subsidization. *Id.* at 1-2. Qwest has got it exactly right: the Commission must retain its existing regulation of incumbent monopolists to prevent them from exercising market power in adjacent markets. Thus, to paraphrase Qwest, the Commission “must take steps to ensure that [the Bells] do not improperly leverage their monopoly over [the local exchange] to the benefit of their [broadband] service.”²⁸

²⁸ *Id.* As an example of such monopoly leveraging, the Cable Television Association of Georgia, et al. (Joint Commenters) (at 2-5) and Knology, Inc. (at 1-4) raise concerns regarding the increased incentives for anticompetitive pole attachment practices by electric utilities once they are providing BPL service in competition with cable and telecommunications companies which

CONCLUSION

AT&T supports the Commission's efforts to develop an additional broadband platform to provide needed competition in the offering of broadband services to American consumers. The commenters generally agree that BPL is an experimental, nascent service, and there is significant disagreement regarding its potential for harmful interference. Moreover, true commercial deployment of BPL will not occur until 2006, at the earliest. Contrary to the Bells' disingenuous claims, potential BPL competition that is at least three years away cannot justify deregulation today.

Respectfully submitted,

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must have access to the utilities' poles. AT&T agrees that the Commission must take steps to prevent such unlawful and anticompetitive practices by electric utilities.

CERTIFICATE OF SERVICE

I, Theresa Donatiello Neidich, do hereby certify that on this 20th day of August 2003 a copy of the foregoing "AT&T Reply Comments" was served by US first class mail, postage prepaid, on the parties listed below.

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