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Federal Communications Commission
Office of Secretary

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Special Access Services	)	RM No. 10593
Unbundled Access to Network Elements	)	WC Docket No. 04-313
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338
Implementation of the Non-Accounting Safeguards of Sections 271 and 272	)	CC Docket No. 96-149
Performance Measurements and Standards for Interstate Special Access Services	)	CC Docket No. 01-321
Section 272(f)(1) Sunset of BOC Separate Affiliate and Related Requirements	)	WC Docket No. 02-112

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NERA Economic Consulting

On Behalf of

BellSouth Corporation

November 8, 2004

NERA
Economic Consulting

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EXECUTIVE SUMMARY

A. Purpose of Declaration

This Declaration responds to a recent report sponsored by the Ad Hoc Telecommunications Users Committee ("Ad Hoc") regarding competition for, and regulation of, switched and special access services provided by incumbent local exchange carriers ("ILECs").[1] We address the central contentions of the *ETI Report* about (1) the alleged ILEC abuse of special access pricing flexibility through "excessive monopoly prices" and (2) the necessity for re-regulation of special access services under the guise of a "self-executing regulatory paradigm." We demonstrate that the *ETI Report* fails to properly measure competition for ILEC-supplied special access services and relies on several spurious measures of ILECs' special access performance to support Ad Hoc's allegation of excessive pricing. We also establish that the prices paid for BellSouth's special access services have declined more rapidly after it obtained pricing flexibility than before, whether analyzed on a voice-grade equivalent basis or at the DS-1 level. We conclude that Ad Hoc's suggested solution—including, initially, re-prescribing prices for ILECs' special access services so as not to generate annual returns greater than 11.25%—is entirely unwarranted and, if implemented, would destroy the efficiency incentives in the ILECs' price cap regulation plans. That outcome would not only be unnecessarily punitive for ILECs but also detrimental for both consumers of telecommunications services and the state of telecommunications competition itself. Ad Hoc's purported solution must, therefore, be rejected.

B. ILEC-Supplied Special Access is Subject to Both Intramodal and Intermodal Competition

Ad Hoc claims that competitive local exchange carriers ("CLECs") that serve large businesses through special access connections have little or no competitive alternatives to special access services provided by ILECs. It also claims that, when it comes to serving large business customers, intermodal competitors or technologies do not provide feasible substitutes for ILEC-supplied special access. We show that these claims have no basis in fact. Moreover, even if they are true (which is certainly not the case), neither claim has any bearing whatsoever on whether (1) the ILEC pricing flexibility is somehow responsible for the paucity of competitive alternatives or (2) the ILECs have used pricing flexibility to gain an unfair advantage. Nothing in Ad Hoc's analysis could possibly implicate ILECs for having raised barriers to entry by would-be CLEC suppliers of special access (such as through anti-competitive pricing, exclusive dealing, strategic capacity investments, or outright interference in CLEC operations). Furthermore, as we show in our Declaration, BellSouth's special access effective prices (whether for all special access services or specifically for DS-1 services) have

[1] Economics and Technology, Inc., "Competition in Access Markets: Reality or Illusion," prepared for the Ad Hoc Telecommunications Users Committee ("*ETI Report*"), August 2004.

actually declined substantially since 1996 and, in particular, since BellSouth was granted pricing flexibility in 2000. Given that this trend in special access prices is very likely to be true for the other ILECs as well, those ILECs can hardly be accused of having exploited "captive" users through supra-competitive prices.

C. Ad Hoc's Claims of Excessive ILEC Earnings from Special Access are Economically and Factually Meaningless

Central to Ad Hoc's complaint is the assertion that the year 2003 earnings of the Regional Bell Operating Companies ("RBOCs") collectively from special access alone ranged from 23% to 69% (with an average of 43.7%). This claim is economically and factually meaningless at multiple levels. First, Ad Hoc's characterization of an accounting rate of return (based on fully distributed, embedded cost) as "profit" is economically meaningless. It is even worse that Ad Hoc should try to measure earnings in that manner at a service-specific level (for ILEC-supplied special access). Its manipulation of ARMIS data to create large accounting rates of return and to pass them off as excessive earnings is nothing short of disingenuous. Those earnings would mean nothing unless they represented true economic profits, which they do not.

Second, under price cap regulation, there was never any "authorized return level." Thus, it is specious for Ad Hoc to propose 11.25% (that served as the authorized return level in the days of interstate rate of return regulation) as the proper basis for re-prescribing prices for ILEC-supplied special access services. By conflating an authorized return level from the rate of return regulation era with returns achieved under price cap regulation (under which no specific rate of return was "authorized" as such), Ad Hoc creates the misleading impression of significant "over-earnings" by RBOCs when, in fact, there was no restriction on RBOC earnings in 2003.

Third, Ad Hoc attempts to minimize the impact of arbitrary cost allocations (which are an inherent feature of embedded cost measurement) on the calculation of earnings from ARMIS data, arguing instead that trends in the data are more important than cost misallocations at the margin. The fact remains that, effective July 2001, the FCC froze its separations allocation factors at their 2000 levels. Hence, changes in traffic, demand, or relative use (including shifts towards more intensive use of data facilities) no longer affect the assignment of costs or investment to ARMIS categories. Consequently, rates of return calculated for special access services in recent years are likely to be both economically meaningless and exaggerated.

Finally, by trying to tell a highly contrived story about the RBOCs' alleged excessive earnings, Ad Hoc diverts attention from the issues that should really be of concern to the FCC and society at large. These concern whether (1) competition of sufficient quality and quantity is occurring for the services in question and (2) prices of those services are being set and sustained at supra-competitive levels. Since the answer is "yes" to the first question and "no" to the second, it does *not* matter in the least that an ILEC's accounting rate of return—even one contrived for a specific service—exceeds some imagined level of acceptability.

D. ILECs' Effective Special Access Prices Have Declined During the Pricing Flexibility Period and There is No Evidence of Market Power

Ad Hoc's assertion that the sheer ability of ILECs to raise their special access service prices amounts to an exercise of market power is false. As we demonstrate in this Declaration, (1) the special access market is unambiguously competitive and (2) special access prices, whether measured in nominal or real terms, have declined faster after the grant of pricing flexibility than even that in the price cap regulation period. Moreover, thanks to the widespread ILEC practice of offering discounted special access services through volume and term contracts, the prices that purchasers of special access services *effectively* pay have trended down, regardless of the levels of tariffed prices.

More fundamentally, the ability to raise prices profitably above competitive levels (without effective retaliation from competitors) only constitutes market power if those initial prices were set at least at competitive levels to begin with. Historically, both before and after the advent of price cap regulation, prices of ILEC-supplied special access services were *not* set—nor could they be made to be set—at levels expected to prevail in unregulated, competitive markets. Therefore, it simply cannot be presumed that ILECs have raised their special access prices from the efficient levels expected in competitive, unregulated markets. Furthermore, no exercise of market power can be inferred purely from any increase in tariffed special access prices in the post-pricing flexibility era.

E. Ad Hoc's Proposed Plan for ILECs' Special Access Services is Flawed and Should be Rejected

Because competition in the markets for special access services is working as intended and prices are falling, there is no justification for Ad Hoc's proposed rollback of pricing flexibility. The four-point plan of action proposed by Ad Hoc as a "remedy" for the alleged excessive pricing by ILECs of their access services is flawed in several important respects and must be rejected. Ostensibly, that plan is a "self-executing regulatory paradigm" that would only be needed as long as the market for access services did not, in Ad Hoc's view, behave competitively. In reality, it is a plan designed to hamstring the ILECs' ability to compete by saddling them with new layers of unneeded and ultimately harmful regulation, principally in the form of a rollback of the pricing flexibility granted to ILECs for special access services.

At a time that ILECs face increasing competition for both retail and wholesale services, the restoration of a particularly onerous form of price cap regulation that Ad Hoc's plan envisions would be both asymmetric and regressive. ILECs have lowered special access prices progressively over time faster than even the most stringent target rates set by the FCC in the past through its choice of the *X* factor. If returns have increased to ILECs, as Ad Hoc contends, then they have done so in an environment in which special access prices have *fallen*, but ILECs' costs have fallen *even faster*. Consumers have benefited on account of both of these developments, and competitors purchasing special access from ILECs have certainly not been compromised (particularly when even lower-priced unbundled network elements have been

readily available alongside). In light of these facts, nothing could be more reactionary and regressive than a plan that re-prescribes ILEC's special access service prices, calculates contrived service-specific rates of return based on embedded costs, and imposes service-specific *X* factors and earnings sharing requirements. Ad Hoc's "self-executing regulatory paradigm" should be rejected.

AD HOC'S COMPLAINT IS UNFOUNDED AND PROPOSED ACTIONS ARE UNJUSTIFIED

A. The market for special access services is effectively competitive and competition has increased under RBOC pricing flexibility

1. The foundation for Ad Hoc's complaint[2] is provided by the *ETI Report*'s discussion of the competitive landscape, specifically with respect to special access services.[3] Ad Hoc's analysis of competition for ILEC-supplied special access is two-pronged and rests on the following claims:

   1. CLECs that serve large businesses through special access connections have little or no competitive alternatives to special access services provided by ILECs.

   2. For serving large business customers, intermodal competitors or technologies cannot feasibly substitute for ILEC-supplied special access.

   Neither of these claims has merit, as discussed in greater detail below.

1. CLEC access to competitive alternatives for ILEC-supplied special access

2. Dedicated and high-capacity connectivity is a prerequisite for serving large business (or "enterprise market") customers. Special access facilities at the DS-1 level and up are frequently required for that purpose. The FCC has already noted that CLECs are not impaired with respect to their access to OC(n) facilities and, even assuming there were

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[2] Economics and Technology, Inc., "Competition in Access Markets: Reality or Illusion," prepared for the Ad Hoc Telecommunications Users Committee ("*ETI Report*"), August 2004.

[3] *Id.*, at 11-26. Ad Hoc's *ETI Report* is one among a number of recent attempts by competitive local exchange carrier ("CLEC") groups to roll back the special access pricing flexibility for ILECs that was approved by the Federal Communications Commission ("FCC") (in CC Docket Nos. 96-262 and 94-1, CCB/CPD File No. 98-63, and CC Docket No. 98-157, Fifth Report and Order and Further Notice of Proposed Rulemaking, August 27, 1999) and granted to specific ILECs subsequently. The others include (1) Declaration of Lee L. Selwyn, on behalf of AT&T Corp. and (2) Mayo/MiCRA/Bates White Economic Impairment Analysis, both in FCC, *In the Matter of Unbundled Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313 and CC Docket No. 01-338 ("*TRO Remand Proceeding*"), October 4, 2004. Furthermore, following a petition for rulemaking to the FCC by AT&T Corp in October 2002 (asking the FCC to revisit its pricing flexibility rules), a coalition of CLECs filed a writ of mandamus before the D.C. Circuit Court of Appeals (*In re AT&T Corp., the CompTel/ASCENT Alliance, eCommerce and Telecommunications Users Group, and the Information Technology Association of America, Petitioners*, On Petition for a Writ of Mandamus Directing Action by the Federal Communications Commission, November 6, 2003).

legitimate concerns about any impairment at all, they would be limited to high capacity facilities at the DS-1 level and, to some extent, the DS-3 level.[4] Even then, CLECs that deploy OC(n) facilities can, with some additional electronic equipment, channelize those facilities down to serve customers at lower capacity levels (such as DS-3 or DS-1).[5]

3. Ad Hoc contends that "[ILECs] remain the sole source of special access connectivity at roughly 98% of all business premises nationwide and that this condition affects even the largest corporate users."[6] While this statement is intended to show that the special access market is skewed in favor of ILECs, it is very misleading. Ad Hoc estimates that there are about 3 million commercial buildings in the country.[7] It further estimates that only about 2% of these buildings are presently being served by non-ILEC special access and intermodal alternatives such as cable and fixed wireless.[8] Even assuming *arguendo* that Ad Hoc's estimate in this regard is correct, to turn that around and claim that the remaining

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[4] *In the Matter of the Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Notice of Proposed Rulemaking ("*Triennial Review Order*"), released August 21, 2003, at ¶298.

[5] The *UNE Fact Report 2004* (filed jointly in the *TRO Remand Proceeding* by BellSouth, SBC, Qwest, and Verizon) explains this matter as follows:

> [F]iber-optic capacity is routinely "channelized" – SONET-based "add/drop" multiplexers and demultiplexers at each end of the glass simply carve virtual dedicated circuits of varying bandwidths out of the single physical whole. This hardware is supplied in competitive markets and is relatively cheap compared to the cost of laying the cable; the price of the hardware continues to drop rapidly; and some customers provide their own add/drop multiplexers. Many competitive carriers routinely deploy multiplexing equipment capable of providing services from DS1 on up as part of their typical set-up in a collocation arrangement in an ILEC's central office. *See* Table 7. Wherever competitive fiber itself is at hand, therefore, high-capacity services can be provided competitively too, in every standard increment.

See *UNE Fact Report 2004*, at III-10 and III-11 and accompanying footnotes, some of which cite AT&T sources describing how channelization is an economical way to separate and transmit lower-capacity signals.

[6] *ETI Report*, at 12.

[7] *Id.*, at 16. The accuracy of this estimate is questionable. Ad Hoc cites the *Triennial Review Order* at fn. 856, which states that the 30,000 commercial office buildings that are served by competitor-owned fiber loops constitute "between 3% to 5% of the nation's commercial office buildings." This implies that the number of commercial office buildings in the nation lies between 600,000 and 1 million. However, fn. 856 goes on to cite WorldCom Comments in Docket No. 96-98, filed June 11, 2001, which, in turn, refers to "CityNet Wins $275 Million in Funding," Washington Post, April 10, 2001, which does not cite a source but refers to 3 million commercial *high-rise* buildings.

[8] *Id.*

98% of the commercial buildings in the nation are dependent on ILEC-supplied special access connectivity is simply a gross exaggeration.[9]

4. First, Ad Hoc provides no evidence that those buildings are, indeed, being served by ILEC-supplied special access, or even by any special access at all. Many commercial buildings are "small" by any standard, and they do not generate enough spending on telecommunications services to warrant economically feasible deployment of high capacity facilities, whether by ILECs or other carriers.[10] Second, and more importantly, we show below that actual special access prices paid by the highest-volume customers (such as Ad Hoc's members) have actually declined over time at an impressive rate. Whether or not those customers actually use non-ILEC sources for special access connectivity, they have benefited from competition and ILEC pricing flexibility in the prices they pay for service.

5. A related argument advanced by Ad Hoc is that interexchange carriers ("IXCs") would step up their use of special access from alternative sources, *if only* such special access were available.[11] Ad Hoc cites AT&T as reporting that, of the approximately 186,000 commercial buildings that it serves using special access, in only 5% of those buildings can it rely on special access service from non-ILEC sources.[12] Ad Hoc also cites Sprint as claiming to depend on ILEC-supplied special access in 93% of the buildings it serves.[13] The explanation, according to Ad Hoc, for this relatively limited use of non-ILEC special access is that CLECs (1) cannot always be relied upon to meet various service quality,

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[9] That "dependence" is a clear concern to Ad Hoc is evident from its assertion that "[e]vidence recently submitted to the FCC by Verizon confirms the extent of enterprise customers' *extreme and utter dependence* upon BOC-provided special access services ...." *Id*, at 13 (emphasis added). As if to back up this statement (and the connotation that enterprise customers have no option but to receive "overpriced" service from ILECs), Ad Hoc attaches two maps showing locations within the New York and Washington DC metropolitan areas in which CLECs use Verizon-supplied special access to deliver local service. *Id*, at 14-15. It is unclear what, if anything, can be gleaned from these maps to support Ad Hoc's claim about its customers' dependence on overpriced ILEC-supplied special access.

[10] Noting this very fact, the FCC stated recently: "The enterprise market is a business customer market of typically medium to large businesses with a high demand for a variety of sophisticated telecommunications services. . . . The record reflects that high-capacity loops, DS1 to OC(n), are generally provisioned to enterprise customers." *Triennial Review Order*, at ¶197, fn. 624.

[11] *ETI Report*, at 17.

[12] *Id.*

[13] *Id.*

performance, and cost-effectiveness criteria, (2) are vulnerable to bankruptcy and cannot deliver service with any certainty, and (3) are not always able to gain access to all end users within buildings to which they deploy their facilities.[14]

6. The line of reasoning that leads Ad Hoc from this lament about the structural conditions plaguing CLECs (as suppliers of special access) to a virtual indictment of ILECs for having allegedly cornered the supply of special access is simply specious. Even if the claimed limitations on reliable and efficient supply of special access services by CLECs are true and even if many users of special access have no alternative for ILEC sources (neither of which is the case), neither has any bearing whatsoever on whether (1) the ILEC pricing flexibility is somehow responsible for the paucity of competitive alternatives or (2) the ILECs have used pricing flexibility to gain an unfair advantage. Nothing in Ad Hoc's analysis could possibly implicate ILECs for having raised barriers to entry by would-be CLEC suppliers of special access (such as through anti-competitive pricing, exclusive dealing, strategic capacity investments, or outright interference in CLEC operations). Furthermore, as shown below, with their special access prices actually declining substantially since 1996, ILECs can hardly be accused of having exploited "captive" users through supra-competitive prices.

7. There is almost no accounting at all in Ad Hoc's analysis for the relevant market facts about special access supply. Those facts are as follows.

   1. Enterprise customers (such as members of Ad Hoc) represent $50 billion in annual telecommunications spending, mainly on long distance and data services. They account disproportionately for the retail demand for high capacity services (e.g., more than 85% of Verizon's retail sales). These customers are served mainly by IXCs (more than 50% of these customers are served by AT&T, MCI, and Sprint, and 73% of them have one of those IXCs as the "primary" service provider).[15]

   2. IXCs have traditionally—and without any apparent difficulty—served enterprise customers (particularly for their long distance needs) over either their own facilities or special access purchased from other carriers (including CLECs). They rely very little on unbundled network elements ("UNEs") to serve enterprise customers with local,

[14] *Id.*, at 18.

[15] *UNE Fact Report 2004*, at III-32 and fns. 97-101.

long distance, or data services. Some of them operate their own high capacity local access and transport facilities.[16]

3. The major IXCs and CLECs have built up competitive fiber networks that, among them, are conservatively estimated to serve over 62,000 local route miles and almost 324,000 total route miles and connect directly to over 31,600 buildings. Moreover, several CLECs are themselves wholesalers that supply capacity to other carriers, with AT&T doing so in as many as 70 MSAs.[17]

4. CLECs now provide a significant share of the special access services delivered to end users. Conservative estimates that do not account for self-provisioning by the major IXCs put the CLEC share of special access revenues at over 36%; with revenues from IXC self-provisioning included, that share may be near 50%.[18]

5. When it comes to data services purchased by enterprise customers, the competitors are in the driver's seat. As if the fact that the three major IXCs (AT&T, MCI, and Sprint) provide 80%-90% of long distance services purchased by enterprise customers were not enough, they also provide approximately 75% of the packet-switched data services (e.g., ATM and Frame Relay) purchased by those customers. Other specialized high-speed data services (such as IP VPN) are also mostly provided by those IXC-CLECs.[19]

6. CLECs currently use special access circuits to serve approximately 60 million voice grade equivalent lines. Interestingly, most CLEC purchases of high capacity loops are in the form of special access rather than UNEs. 93% of DS-1 and 98% of DS-3 loops sold by Verizon to CLECs are in the form of special access. For SBC, those figures are 77% and 97%, respectively, and for BellSouth, they are 70% and 97%, respectively. Time Warner is a facilities-based CLEC that relies exclusively on special access to serve its customers, while US LEC and Pac-West are examples of CLECs that rely primarily on special access high capacity loops (as opposed to UNEs) to serve their customers.[20]

8. These facts provide a thumbnail sketch of the competitive landscape in which the CLECs operate and, in particular, the successes they have had in serving large business customers (including members of Ad Hoc) with voice, data, and special access services. Coupled

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[16] *Id.*, at III-34 and Table 18 [redacted]r III.

[17] *Id.*, Tables 1 and 11 in Chap[redacted]I. Independently, the New Paradigm Resources Group estimates the total route miles of CLEC networks at 346,759 in 2003, up 6.1% from the previous year (showing strong forward progress). *CLEC Report 2004*™, Table 15.

[18] *Id.*, at III-35.

[19] *Id.*, at III-33.

[20] *UNE Fact Report 2004*, at III-39 and fns. 129-133.

with the fact that CLECs today enjoy far more stability than in years past (with fewer bankruptcies, many CLECs emerging from bankruptcy stronger than before, and some prominent non-IXC CLECs also posting positive EBITDA or net income),[21] it is hard to recognize the distressing picture painted by Ad Hoc.

2. Intermodal competition for ILEC-supplied special access

9. Ad Hoc contends that intermodal competitive alternatives (such as cable and fixed wireless platforms) do not offer "realistic alternatives" to large business customers.[22] Ad Hoc explains that cable cannot be a serious contender because "networks constructed by cable companies are largely designed to reach residential dwellings, not business locations,"[23] and "because cable companies are primarily oriented towards a mass-market customer base, their telephony and data (i.e., cable modem) offerings generally fall short of ILEC offerings in the areas of service reliability and security."[24] Similarly, Ad Hoc believes that fixed wireless suffers from problems concerning security, service quality, and quality of connections (particularly since that platform requires line-of-sight transmission).[25]

10. The facts, again, do not support Ad Hoc's claims. Despite its early technical shortcomings, fixed wireless has now become a viable alternative to special access, and cable companies are actively pursuing business customers. Consider the following facts:

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[21] *CLEC Report 2004™*, at 1-7.

[22] *ETI Report*, at 22-24.

[23] *Id.*, at 22.

[24] *Id.*, at 23.

[25] *Id.*, at 24. At least some in the broadband wireless industry believe that these concerns may be exaggerated or otherwise fed by a lack of information. Quality of service issues are frequently addressed by fixed wireless providers through Service Level Agreements that guarantee a certain level of quality (such as that expected from a DS-1 line). Security is more of an issue for service providers than for customers because wireless signals can be encrypted like any network traffic. Interference is a real issue but service providers have resorted to various modulation techniques and network management software to minimize it. Robert Hoskins, "Reasons for Optimism: Broadband Wireless ISP's Proving The Business Case," *Broadband Wireless Online*, October 28, 2001. Exciting recent developments on the Wi-Fi (802.11b) front and new business models introduced by Boingo, Gric and iPass (all Internet traffic aggregators) presage new possibilities for serving business customers, especially those with mobility and roaming needs. Tim Sanders, "What Does the Future Hold for Fixed Wireless ISPs that Want to Provide Roaming Services to Their Customer Base?" *Broadband Wireless Exchange Magazine*, 2004.

1. In their pursuit of business customers, all of the nation's major cable operators[26] have either deployed fiber in urban areas or extended their hybrid fiber/coaxial networks to provide cable modem services in urban, suburban, and rural areas. Thus far, cable companies appear to be serving business customers in at least 90 MSAs. Research reported by In-Stat/MDR in December 2003 showed that 41% of business customers with 1,000+ employees (i.e., enterprise customers), 32% of business customers with 100-999 employees, and 44% of business customers with 5-99 employees use cable modem service to receive certain high capacity services. Another independent study has confirmed that business customers are increasingly using cable modem service in place of traditional special access and private line services.[27]

2. The advent of Voice over Internet Protocol ("VoIP") technology has given cable operators an important cost-effective means to provide voice and data services to business customers. For example, [Cablevision] Lightpath reports providing a suite of voice, data, and Internet communications services over its fiber-optic network to business customers in New York, New Jersey, and Connecticut that collectively account for over 140,000 access lines and 18,000 Internet circuits. Similarly, Cox Business Services provides voice, data, and transport services to over 100,000 customers. Cox sees a "significant opportunity" in the fact that over 320,000 businesses are located within 100 feet of its network. Finally, Time Warner claims to have created network infrastructure that passes 1.2 million business locations.[28]

3. FCC statistics demonstrate significant growth in in-service coaxial cables (whether "high-speed lines" with speeds of over 200 kbps in *at least* one direction or "advanced services lines" with speeds of over 200 kbps in *both* directions)[29] between 1999 and 2003. For *all* customers, the compound annual growth rate ("CAGR") for coaxial high-speed lines was nearly 85% and that for coaxial advanced services lines was over 104%. For *residential and small business* customers alone, those CAGRs were almost identical at 85% and nearly 105%, respectively. For *all other* (comprising medium and large business, institutional, and government)[30] customers, those CAGRs were lower but still impressive at 33% and 53%, respectively. The FCC notes that large business customers are most likely to use the advanced services lines,[31] and FCC statistics show that,

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[26] These include Cablevision, Time Warner, Charter, Comcast, Cox, and RCN.

[27] *UNE Fact Report 2004*, at III-36 and III-37 and fns. 123-128.

[28] "Cablevision Systems Corp. Lightpath Offers Next Generation Services Using DWDM Solution," *Market News Publishing*, December 2, 2003. "Enterprise Presents Even 'Bigger' Opportunity for Cox Business Service in 2004," *Cox Communications News Releases*, March 29, 2004. Andrea Figler, "Turning Business Into Customers," *Cable World*, December 9, 2002.

[29] Thus, advanced services lines are a subset of high-speed lines.

[30] See definitional note for Table 11 in FCC, Industry Analysis and Technology Division, *High-Speed Services for Internet Access: Status as of December 31, 2003* ("*FCC High-Speed Report*"), June 2004.

[31] *FCC High-Speed Report*, at 3, fn. 8.

between December 2002 and December 2003, almost 9,900 such lines were added for those customers.[32]

4. The FCC has licensed a substantial amount of spectrum (collectively, about 2.9 GHz) for use by fixed wireless operators, and there is no imminent danger of exhaustion of that spectrum. Unlicensed spectrum is also available for the deployment of the fast-growing Wi-Fi technology using the 802.11 platform. Research by In-Stat/MDR has also shown that 40% of business customers with 1,000+ employees, 29% of business customers with 100-999 employees, and 23% of business customers with 5-99 employees set up plans to use fixed wireless during the course of 2004.[33]

5. A competing provider of local and long distance voice, data access, and Internet access providers that has made headway with fixed wireless technology is XO Communications. Having successfully completed trials in California in late 2003, XO announced plans to roll out its LMDS fixed wireless service, at first in San Diego and Irvine and eventually in some or all of the top 30 cities, for 95% of which it already holds fixed wireless spectrum licenses. XO claims to be able to provide three times more bandwidth than a conventional T-1 line (a feature certain to appeal to large business customers) and high-speed Internet and Ethernet services as well.[34]

11. There is no question that intermodal alternatives are becoming increasingly available even for serving large business customers. Both technological and economic solutions are being found to overcome early obstacles that impeded the progress of these alternative technologies, particularly fixed wireless. However, some observers are convinced that fixed wireless is marking a return, in even stronger shape than before.[35] In the meantime, the lower-cost VoIP platform has helped cable companies offering broadband access along

[32] This can be calculated from Tables 2 and 4 of the *FCC High-Speed Report*. Curiously, the *ETI Report*, at fn. 42, claims that "approximately 3,400 new coaxial cable connections were added that served large business subscribers, with the total number of connections to high speed cable connections to large business users still less than 30,000 in total." Although the phrasing is difficult to follow at first, it is clear that Ad Hoc is claiming that coaxial connections used by large business customers increased by only around 3,400 when, in fact, the FCC's own statistics show that the gain was almost three times higher at just under 9,900. Not only does Ad Hoc get that count wrong, it implies that a total of 30,000 connections is not a large number. Even though cable companies have sold considerably more high-speed or advanced lines to residential and small business customers than to large business customers, 30,000 is *not* a trivial fraction of the number of business establishments that would be considered "large."

[33] *UNE Fact Report 2004*, at III-36 and fns. 120-122.

[34] Kurt Mackie, "XO Cites Success in California LMDS Trials," *Broadband Wireless Business*, January 14, 2004.

[35] Dan O'Shea, "The Second Coming of Fixed Wireless," *Telephony*, April 7, 2003. Tim Sanders, *op cit.*, fn. 25 *supra*.

with other services pull ahead of ILECs whose DSL offerings have not enjoyed comparable economies of scale.[36]

B. Embedded, fully-distributed accounting costs for a single service—and associated earnings—cannot be used as a reasonable measure of forward-looking incremental cost or economic profit

12. Central to Ad Hoc's complaint is the assertion that the year 2003 earnings of RBOCs collectively from special access alone ranged from 23% to 69% and "averaged a jaw-dropping 43.7% ... i.e., close to four times the most recently authorized return level."[37] This claim is economically and factually meaningless at multiple levels.

13. First, it is extraordinary that Ad Hoc should characterize an accounting rate of return (based on fully distributed, embedded cost) as "profit." Even assuming that such a rate of return can be meaningfully calculated at a service-specific level—which it certainly cannot—Ad Hoc's manipulation of ARMIS data to create large accounting rates of return and to pass them off as excessive earnings is nothing short of disingenuous. Those earnings would mean nothing unless they represented true economic profits. For example, Ad Hoc's statement that "[r]eturns of this level simply could not be sustained over a multi-year period in a mature market (such as the market for local telecommunications service) if even a modest amount of *bona fide* competition were present"[38] reveals a disdain for the proper use of meaningful economic measures. Ad Hoc's attempts to *defend* the use of accounting returns[39] calculated from manipulated ARMIS data are just as objectionable.[40]

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[36] Jane Black, "Saving the Bells' Broadband Bacon," *Business Week Online*, April 21, 2003.

[37] *ETI Report*, at 28. Specifically, BellSouth is alleged to have earned 69.1% on special access services in 2003.

[38] *Id.*, at 29.

[39] *Id.*, at 29-32.

[40] The economists that wrote the *ETI Report* should legitimately be expected to adhere to a higher standard of analysis and to be scrupulously faithful to the proper use of economic measures. It is particularly disappointing that they should defend their misuse and manipulation of ARMIS data and accounting returns by arguing that "the ILECs themselves have had as large or larger a role in the development of [costing and accounting] rules as any other party." Those rules were created for the specific purpose of calculating firm-level earnings under a rate of return regulatory regime, and the fact that they do not lead to measures of *economic* profitability has been appreciated for a long time. Moreover, to the best of our knowledge, ILECs have never sought to use those rules for ratemaking purposes or for assessing the competitiveness of their prices. It is simply not legitimate for

14. Second, under price cap regulation, there was no "authorized return level." The 11.25% that Ad Hoc considers the authorized return level was *never* set as a parameter of any interstate price cap plan for ILECs at any time since the inception of price cap regulation. Rather, as Ad Hoc itself recognizes,[41] it was the authorized rate of return that the FCC had authorized in 1990 for interstate *rate of return* regulation of the RBOCs. By conflating an authorized return level from the rate of return regulation era with returns achieved under price cap regulation (under which no specific rate of return was "authorized" as such), Ad Hoc creates the misleading impression of significant "over-earnings" by RBOCs when, in fact, there was no restriction on RBOC earnings in 2003. Ad Hoc attempts to find fault with precisely the outcome that price cap regulation envisions, namely, the regulated firm's ability to exceed the normal risk-weighted return on capital (i.e., its true opportunity cost) through cost-cutting, greater efficiency, and productivity growth. By seeking to artificially restrain the RBOC's ability to reap the fruits of its superior performance—indeed, by characterizing it in pejorative terms such as "jaw-dropping," "whopping," and "dizzying heights"[42]—Ad Hoc is making a naked attempt to roll regulation back to the rate of return regulation era. Such an attempt must be rejected.

15. Third, Ad Hoc asserts that "ARMIS...cost-misallocations at the margins [do] not affect the overall integrity of *trends* in the data, *since those (arguably) mis-allocations do not change from period to period.*"[43] On the contrary, one important recent change in ARMIS accounting does affect the change from period to period in relationships among ARMIS categories. Effective July 2001, the FCC froze its separations allocation factors at their 2000 levels. Hence, changes in traffic, demand, or relative use (including shifts towards

Ad Hoc's economists to use accounting returns to make statements about "excessive earnings," particularly in a regulatory environment that *allows* the regulated firm to earn positive economic profit and places no restrictions on the size of that profit.

[41] *ETI Report*, at v.

[42] *Id.*, at 28, 29, and 32.

[43] *Id.*, at 29. Emphasis in original.

more intensive use of data facilities) no longer affect the assignment of costs or investment to ARMIS categories.[44]

16. Finally, by trying to tell a highly contrived story about the RBOCs' alleged excessive earnings, Ad Hoc diverts attention from the issues that should really be of concern to the FCC and society at large. What should matter most in any investigation of ILEC performance with respect to their access services is whether (1) competition of sufficient quality and quantity is occurring for the services in question and (2) prices of those services are being set and sustained at supra-competitive levels. Since the answer is "yes" to the first question and "no" to the second, it does *not* matter in the least that an ILEC's accounting rate of return—even one contrived for a specific service—exceeds some imagined level of acceptability. Indeed, the *entire* discussion in the *ETI Report* of excessive ILEC earnings on special access services is a grand diversion from issues of any substance.

17. Indeed, it is disturbing that Ad Hoc's ploy of holding up contrived accounting returns as examples of supposed ILEC excess has now been espoused by other CLEC-sponsored economists as well.[45] Not only is such "analysis" flawed, it also runs counter to the positions that AT&T's economists have themselves taken in the past. As Professor Alfred Kahn and one of us pointed out nearly two years ago:[46]

> This is a truly outrageous claim, relying as it does on measures of fully allocated book costs of services whose production in common with others entails a very high proportion of fixed and common costs and significant economies of scope—all the more so coming from a company and specific witnesses who have consistently and correctly decried the basis for such claims in economic terms for many decades. ...

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[44] FCC, *In the Matter of Jurisdictional Separations and Referral to the Federal-State Joint Board*, CC Docket No. 80-286, Report and Order, released May 22, 2001.

[45] See, e.g., Mayo/MiCRA/Bates White Economic Impairment Analysis, *op cit.*, at ¶116.

[46] Declaration of Alfred E. Kahn and William E. Taylor, on behalf of BellSouth Corporation, Qwest Corporation, SBC Communications, Inc., and Verizon, in FCC, *In the Matter of AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, RM No. 10593, December 2, 2002, at 7-9.

High or increasing rates of return calculated using regulatory cost assignments for interstate special access services do not in themselves indicate excessive economic earnings reflecting the exercise of market power. Indeed, regulatory rates of return for geographic subsets of single services in multi-product, multi-geographic firms bear no relationship with economic profits and thus can serve no useful purpose in determining whether pricing flexibility has or has not been excessively permissive. ILECs are integrated multi-regional firms and rely on an integrated regional management structure employing the regional physical and human resources to provide a multiplicity of services. The cost allocations required render such a calculation meaningless. ...

The regulatory expedient of assigning fixed costs among categories (e.g., between regulated and unregulated or between interstate and intrastate jurisdictions), in proportion to variable costs or demand volumes, though "reasonable," is not cost-causative, and the resulting costs are not economic costs. It might be equally reasonable to allocate railroad overhead costs to services by volume, weight or value, but shippers of feathers, coal and diamonds would undoubtedly disagree about the results. In Dr. Willig's prophetic words some 15 years ago,

> Fully allocated cost figures and the corresponding rate of return numbers simply have zero economic content. They cannot pretend to constitute approximations to *anything*. The "reasonableness" of the basis of allocation selected makes absolutely no difference except to the success of the advocates of the figures in deluding others (and perhaps themselves) about the defensibility of the numbers. There just can be no excuse for continued use of such an essentially random, or, rather, fully manipulable calculation process as a basis for vital economic decisions by regulators.[47]

18. Ironically, AT&T presented this very argument to regulators in Massachusetts when requesting regulatory relief for its intrastate long distance services:

> AT&T is an integrated, multijurisdictional company providing telecommunications services worldwide using an integrated national management structure and employing the same physical and human resources to provide international, interstate and intrastate services. Because AT&T's services used the same network, computers and other facilities whatever the jurisdiction, determining a cost basis for calculating an economically meaningful rate of return is impossible. Rationally determining the cost basis for purposes of pricing individual state subsets of those services is also an economically

[47] W. J. Baumol, M. F. Koehn and R.D. Willig, "How Arbitrary is 'Arbitrary'? – or, Toward the Deserved Demise of Full Cost Allocation," *Public Utilities Fortnightly*, 120(5), September 3, 1987, at 21.

> impossible task. Yet, Massachusetts ROR regulation requires that a fully-allocated cost basis be established and that the prices for AT&T's intrastate services be modified to reflect such cost allocations. Allocating AT&T's multistate costs to determine AT&T's Massachusetts costs, further allocating those costs between interstate and intrastate services, and yet further allocating the intrastate costs among numerous intrastate services is economically irrational as a basis for setting prices. There is no rational basis for believing that rates based on fully allocated costs are either fair or economically justified.[48]

19. It is just as "economically irrational" to use accounting earnings and fully distributed costs to assess an ILEC's special access prices as it was to assess AT&T's long distance prices in Massachusetts. No allocation of ILEC accounting costs between regulated and unregulated intrastate and interstate services can be cost-causative. Among interstate services, the allocation of costs to special access services requires additional arbitrary assumptions. This is hardly surprising because fixed and shared and common costs represent a significant fraction of an ILEC's total costs. When a multiproduct firm like an ILEC uses one network to provide interstate and intrastate services, carrier services (special and switched access), and retail services (local and long distance), there is no non-arbitrary or cost-causative way to allocate costs that are not directly attributable to individual services.[49]

20. Were Ad Hoc to succeed in having ILEC-supplied special access prices "re-targeted to competitive levels," i.e., reset so as not to permit a return greater than 11.25% for special access services, the financial consequences alone of such a move would be immense. In June 2003, a group called the Special Access Reform Coalition ("SPARC") that represents CLEC interests submitted a study that purported to show that re-targeting special access prices in that manner would add $14.5 billion to the Gross Domestic Product and 132,000

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[48] Initial Brief of AT&T Communications of New England, Inc., dated April 23, 1992, in the Commonwealth of Massachusetts Department of Public Utilities proceeding DPU 91-79, at 42-43. Citations omitted.

[49] Ad Hoc attempts to minimize the problems with cost allocation by arguing that "mis-allocations at the margins" have little adverse effects on trends in data because those "mis-allocations do not change from period to period." *ETI Report*, at 29. We disagree with that premise. When fixed and shared and common costs are a fraction of the ILEC's total cost, misallocations are unlikely to be minor, in and of themselves, or have benign consequences for pricing services. Therefore, almost universally, economists reject allocated (or distributed) costs as the basis for efficient pricing, regardless of whether the misallocations are small "at the margin" or invariant over time.

new jobs to the economy in two years. In December 2003, the ILECs countered with their own study that exposed flaws in the SPARC study and the very idea of constraining ILECs to earning no more than 11.25% on their special access services. The seriousness of this criticism was not lost on the FCC. In fact, it cited that criticism as one of the factors behind its decision to delay acting on AT&T's petition regarding ILEC-supplied special access and, subsequently, to oppose AT&T's (and other petitioners') petition to the D.C. Circuit Court of Appeals for a writ of mandamus compelling the FCC to revisit its pricing flexibility rules for ILEC-supplied special access.[50]

21. The redistributive effects of any re-prescription of ILEC-supplied special access service prices are clearly likely to be enormous, as the FCC has correctly recognized. Although our position is—and consistently has been—that accounting rates of return calculated by one means or another for specific subsets of an ILEC's services are meaningless, it is evident that Ad Hoc (like the SPARC before it) are attempting to secure enormous bounties for its members and CLECs generally, at the long run expense of consumers and the state of market competition. More importantly, from our point of view, any direct loss in special access revenue that the suggested roll back in special access pricing flexibility would bring about would only represent the leading edge of the enormous loss of productivity (and efficiency incentives generally) and the incentive to invest that BellSouth (along with other ILECs) would suffer. Ad Hoc's proposal would mark a complete retreat from a decade and a half of more enlightened regulation designed for an increasingly competitive telecommunications market. A return to unbridled rate of return regulation is *not* in the economic interests of the telecommunications industry, a fact that the FCC well appreciates.

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[50] D.C. Circuit Court of Appeals, *In re Petition of AT&T Corp. et al., Petitioners*, No. 03-1397, Opposition of the Federal Communications Commission to Petition for Writ of Mandamus ("*FCC Opposition*"), January 9, 2004. In opposing the petition, the FCC remarked (*FCC Opposition*, at 26):

> In fact, petitioners' interim relief request is even more extraordinary than their rulemaking request, because it presumes the correctness of their position, and because it goes far beyond seeking to restore the status quo that existed before the implementation of pricing flexibility. However, petitioners plainly are not entitled to interim relief where the result they seek – a complete reworking of the agency's special access rules, after they were upheld by this Court – is not "preordained."

C. Ad Hoc's analysis is flawed in all respects

1. Costs

22. Ad Hoc alleges that ILEC's access services continue to be priced so as to generate revenues that "substantially" exceed embedded costs—special access even more than switched access—and subsidize local exchange services.[51] Claims that prices exceed embedded costs have little economic merit. Indeed, Ad Hoc fails to apply the proper test of cross-subsidy. For a service to *provide* a subsidy, it must generate revenue in excess of its "stand-alone" cost. Conversely, for it to *receive* a subsidy, it must fail to generate revenue that recovers at least the incremental costs (both variable and fixed) that are directly attributable to it. The proper cost standard for the latter is total service long run incremental cost ("TSLRIC"). A price that exceeds embedded cost does not automatically mean that it provides a subsidy; that price must be shown to exceed the stand-alone cost per unit of service. Ad Hoc makes no such showing.

23. Commenting on ILEC access service prices, Ad Hoc contends:

> Now that the [Bell Operating Companies] and most other ILECs have entered the interLATA market, perpetuation of this access charge policy creates formidable market distortions and inappropriately benefits BOCs and other LECs—which do not pay the excessive access charges to themselves—while competitively disadvantaging interexchange carriers that remain subject to such excessive local access fees. Indeed, the use of access charges as a source of implicit subsidy to local service *is not allowable by law*. More to the point, there is no indication that any of the excess profits *currently being generated by the overpriced access services* are actually being used to support or subsidize basic local phone service.[52]

These comments contain several erroneous allegations.

24. First, Ad Hoc implies that the application of access charges is asymmetric: while ILECs incur only the underlying incremental cost of access services when they use those services themselves, their retail-stage competitors (such as IXCs) are obliged to pay the full prices

[51] *ETI Report*, at 6.

[52] *Id.* Emphasis in original.

of those services. Therefore, in Ad Hoc's view, since the access service prices exceed their costs, an unfair competitive benefit is derived by the ILECs at the expense of IXCs with whom they compete. If true, this argument can form the basis of a legitimate claim of price squeeze; however, that is simply not the case for several reasons.

1. Section 272(e)(3) of the Telecommunications Act of 1996 ("1996 Act") prevents an ILEC from providing access service to itself (or to its own structural affiliate) on terms and conditions that differ from those it offers to competitors like IXCs.

2. Imputation, either explicit (that requires the ILEC to charge itself the *price* of the access service) or implicit (that obliges the ILEC to account for the full opportunity cost of failing to sell an interexchange service when it provides access service to an IXC instead) prevent the ILEC from conducting any price squeeze.

3. A vertical price squeeze is only possible if access service is an essential facility for which feasible competitive alternatives are not economically available from other sources. As was seen earlier in this Declaration, the special access market is sufficiently competitive and special access service is decidedly not an essential facility.

25. Second, Ad Hoc implies that there is something inherently excessive or anti-competitive about the *level* of an access service price when it exceeds the underlying cost—the embedded cost in Ad Hoc's formulation. Even if the price floor is properly selected as incremental cost (say, TSLRIC), the worst that can be said about a price that exceeds that price floor is that it is likely to constrict the *absolute* level of demand for access service (and the downstream retail service for which it is an input) below the level that would be observed if all prices were set at TSLRIC. No *relative* competitive advantage accrues to the ILEC from an access service price in excess of its true price floor.

26. Third, Ad Hoc doubts whether any of the excess revenues allegedly being earned by ILEC access services is even being used to subsidize local exchange services. This doubt is expressed without any empirical support but, in any event, it is besides the point. ILECs customarily use markups in service prices (including those of access services) to recover their fixed and shared and common costs. Whether or not some of those markups are currently being directed towards the subsidy for local exchange services is largely irrelevant.

27. Finally, Ad Hoc claims that any provision of a subsidy to local exchange services from marked-up prices for ILEC-supplied access services is precluded by current law. Indeed, Section 254 of the 1996 Act requires that all implicit (price-based) subsidies be converted into explicit support from a competitively neutral universal service fund into which *all* carriers must contribute equitably. However, the current reality is that only some states have completed the transition to universal service funds for the *intra*state segment of ILECs' operations. In the interim, price-based contribution to the recovery of the intrastate portion of the ILEC's universal service costs remains necessary.

2. Revenues and volumes

28. A constant refrain of the *ETI Report* is that ILECs' access (and, in particular, special access) "profits" have grown without bounds ever since the grant of pricing flexibility. Ad Hoc proposes a plan of action to eliminate "excess revenues," suggesting thereby that "profit" growth has been driven primarily by revenue growth, which, in turn, has been sustained by "excessive prices."[53] Ad Hoc pays little attention, however, to the contribution of cost reductions to any perceived growth of accounting returns. Be that as it may, it is appropriate to ask whether Ad Hoc has correctly identified the most important source of revenue growth.

29. As is commonly known, revenue growth can occur when either prices or sales volumes rise.[54] Higher prices can cause revenues to be higher (other things being equal) only if demand for the service in question is price-inelastic. For special access services, particularly at DS-3 and higher capacity levels, the available evidence suggests that demand is actually quite price-elastic.[55] Therefore, contrary to Ad Hoc's contention,

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[53] *Id.* at 7.

[54] Revenue is simply the pr[redacted]lied by the volume of sales. According to the law of demand, other things being equal, a price incre[redacted]ction) should reduce (increase) the volume of sales. However, if a price increase also causes revenue to increase, then that must mean that the *percent* increase in price has *overcome* the *percent* reduction in sales volume that followed the price increase. On the other hand, if it is sales volume growth that drives revenue up, then that must mean that the *percent* increase in sales volume has *overcome* the *percent* reduction in price that triggered the growth of sales.

[55] Ironically, the best recent evidence that demand for special access (particularly at the DS-1 level and up) was produced in a study sponsored by CompTel/ASCENT, the same organization that lists the *ETI Report* among its "position papers" (dated August 25, 2004). See Paul N. Rappaport, Lester D. Taylor, Arthur S. Menko, and

higher prices are unlikely to be the primary source of any revenue growth for ILEC-supplied special access services.

30. The alternate possibility—that special access sales volumes rose in response to *lower* special access unit prices (such as when expressed on a voice grade equivalent basis)—has far more credence. It is more consistent with (1) the fact that, at current prices, special access demand is generally price-*elastic*, (2) the FCC's observation that significant competitive alternatives exist for ILEC-supplied special access (particularly at higher capacity levels), and (3) the empirical evidence on special access demand growth in recent years. As we explain below, regardless of the level of tariffed special access prices, *actual* prices paid for special access services have trended downward in both nominal and real terms because of the significant discounts available through volume and term contracts.

31. The *ETI Report* relies on special access revenue data taken from ARMIS records. As first noted in the *Kahn-Taylor Declaration* two years ago, ARMIS special access revenues include DSL revenues, but the ARMIS special access lines do *not* include DSL lines (the high-frequency components of ordinary switched access lines). The presence of DSL revenues thus causes ARMIS to *over*state actual special access revenues.[56] Moreover, DSL revenues have been growing rapidly, both in absolute terms and relative to special access revenues. Thus, any (average) revenue per special access lines calculated from ARMIS data, without any adjustment for DSL revenues, would overstate both the level and the growth of special access prices (as measured by special access revenue per special access line). As one of us demonstrated recently, first subtracting out DSL revenues from ARMIS special access revenues and then dividing the difference by voice grade equivalent ("VGE") or DS-0 lines revealed a general pattern of decline since 1996 in the average

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Thomas L. Brand, *Macroeconomic Benefits from a Reduction in Special Access Prices*, June 12, 2003, especially Section 3.3 and Appendix 5. The authors estimated the own-price elasticity for DS-1 to be –1.31 and for DS-3 to be –1.91 (both in the elastic range) and concluded that "[t]hese results indicate that a drop in special access prices will result in an equivalent or greater response in demand, especially for the higher bandwidth services."

[56] Correcting for the presence of DSL revenues in special access reduces the accounting rates of return based on those revenues and by far more than the "couple of percentage points" Ad Hoc claims (*ETI Report*, at fn. 55).

special access revenue (per VGE).[57] In fact, that decline (whether in nominal or inflation-adjusted real terms) occurred at a faster rate *since* the grant of pricing flexibility in 2001 than before.

3. Prices

32. For this Declaration, we used the same methodology to examine trends in special access prices charged by BellSouth over the 1996-2003 period. This period has two sub-periods: 1996-2001 (the "price cap period") and 2001-2003 (the "pricing flexibility period").[58] We first assembled data from ARMIS sources on interstate special access revenues (ARMIS Report 43-04, row 4012) and special access (analog and digital) lines in service expressed on a VGE basis (ARMIS Report 43-08, row 910). Next, we used DSL revenues (commencing from 1999) available from BellSouth sources to calculate BellSouth's interstate special access revenues *net* of the DSL revenues. We then divided that net revenue by the number of special access lines in service to obtain BellSouth's average interstate special access revenue (on a per VGE basis), expressed in nominal (or current) dollars. We also created an alternate series of average interstate special access revenue, expressed in real (or constant 1982-84) dollars by deflating the nominal dollar series by the consumer price index-urban ("CPI-U") available from the Bureau of Labor Statistics.

33. Figure 1 displays BellSouth's special access revenue (per VGE) for the period 1996-2003, in both nominal and real terms. There is no mistaking the general downward trend in both series, including during the all-important post-pricing flexibility sub-period. Table 1 displays the CAGR for BellSouth's special access price—again expressed by its special access revenue (per VGE)—for the full 1996-2003 period and for the two sub-periods within it.

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[57] Reply Declaration of William E. Taylor, on behalf of Verizon, in the *TRO Remand Proceeding*, October 19, 2004. Revenue per special access VGE was calculated for Verizon in that instance.

[58] The FCC authorized special access pricing flexibility for BellSouth in December 2000. *See* FCC, *In the Matter of BellSouth Petition for Pricing Flexibility for Special Access and Dedicated Transport Services*, CCB/CPD No. 00-20, Memorandum Opinion and Order, released December 15, 2000. Therefore, we take 2001 as the start of the pricing flexibility sub-period.