MiCRA *Microeconomic Consulting & Research Associates, Inc.*

1155 Connecticut Avenue NW, Suite 900
Washington, D.C. 20036
(202) 467-2500
www.micradc.com

Debunking the Make-Whole Myth: A Common Sense Approach to Reducing Irrational Telecommunications Subsidies White Paper #3

Michael D. Pelcovits, Ph.D.

November 17, 2008

This paper, the third in a series of white papers, was commissioned by Comcast. The methodology, analysis, and conclusions are the author's own.

Table of Contents

MiCRA *Microeconomic Consulting & Research Associates, Inc.*

1155 Connecticut Avenue NW, Suite 900
Washington, D.C. 20036
(202) 467-2500
www.micradc.com

Executive Summary

Intercarrier compensation reform has been on the agenda of policymakers for many years. Most recently, the FCC issued a Further Notice of Proposed Rulemaking, which if adopted and accompanied by some key modifications, would make major strides in reducing the inefficiencies in the current regime. Reform is essential to bring rationality to the current regimes governing the rates for intercarrier compensation (ICC). Intrastate and interstate access charges, although much lower than in the past, are still above cost and not even uniform in many states. Above-cost charges for access and other intercarrier compensation rates can give some carriers an artificial advantage over their competitors and perpetuate past regulation-induced inefficiencies. Furthermore, when ICC rates are not uniform for functionally indistinguishable traffic, carriers will engage in costly efforts to circumvent the highest charges.

The FCC has proposed as a new cost benchmark for ICC rates, the long-run incremental cost (LRIC) of terminating calls. This is a good benchmark from a conceptual standpoint and can be measured without enormous difficulty. From an economic standpoint, the LRIC standard ensures that no carrier will be imposing the cost burden of serving its own customers on another carrier. From a practical standpoint, LRIC can be estimated by analyzing and estimating only the incremental traffic-sensitive components of a modern-day switch. We can say with great certainty that LRIC-based rates will be well below the current $.0007/minute mirrored reciprocal compensation rate.

Many proposals for intercarrier compensation reform, however, are accompanied by provisions that require ratepayers to make up the losses of revenue from reductions in intercarrier compensation rates. Further, some proposals include a make-whole fund to offset revenue losses caused by reductions in access lines and access usage experienced by the incumbents (either as a result of competitive inroads or an overall decline in the demand for wireline narrowband service.) The FCC's recent Notice scales back the make whole approach so that it only applies to rate-of-return (RoR) regulated ILECs. This is a major step forward in many respects, although still flawed in its make-whole approach to subscriber line charge (SLC) increases and in its treatment of rate-of-return regulated firms.

The "make-whole" paradigm is an anachronism, based solely on the traditional rate-of-return regulatory model, which no longer applies *even to most RoR regulated LECs*. This paradigm ignores the dramatic developments in the telecommunications industry, which have created a new financial reality for the ILECs. The ILECs' business model has evolved substantially in the last several years from the model of a regulated telephone

company. Their customers are subscribing to high-priced bundles of services, which include local and long distance telephone service, Internet service, and video service. The profitability of serving residential customers no longer depends on the revenues and costs of local exchange service alone. Further, the ILECs' ability to invest in infrastructure is not threatened by a potential loss in access revenues. Rather, many of the ILECs only need to redirect their abundant inflow of cash to investing and away from acquisitions and stock buy-backs.

Finally, the carrier of last responsibility (COLR) of the ILECs has been raised as a reason to offset any access reductions with make-whole payment. We believe that the COLR issue is legitimate, but that its significance is vastly overstated. Importantly, *the potential cost of this obligation is much less than the current sources of explicit and implicit subsidies* now received by the ILECs. Policymakers should increase or redirect explicit subsidies where the need for COLR support is identified. But in the meantime, there is no reason to delay an immediate and comprehensive reform of the intercarrier compensation regime.

MiCRA *Microeconomic Consulting & Research Associates, Inc.*

1155 Connecticut Avenue NW, Suite 900
Washington, D.C. 20036
(202) 467-2500
www.micradc.com

Debunking the Make-Whole Myth: A Common Sense Approach to Reducing Irrational Telecommunications Subsidies

Most incumbent local exchange carriers (ILECs) and other voice providers agree that above-cost charges for access and other intercarrier compensation (ICC) rates give some carriers an artificial advantage over their competitors and perpetuate past regulation-induced inefficiencies. Furthermore, when ICC rates are not uniform for functionally indistinguishable traffic, carriers will engage in costly efforts to circumvent the highest charges. ILECs are losing increasing revenues to these so-called "arbitrage" efforts and are now pressing very hard for reforms that will eliminate or substantially diminish the incentives for voice service providers to engage in such efforts. This appears to be providing the impetus to policymakers to finally come to grips with an issue that until recently was a key issue for competitors only and thus languished for years in policy purgatory. Recently the FCC issued a Further Notice of Proposed Rulemaking addressing intercarrier compensation and universal service issues.[1] The November Notice represents major strides in reducing the inefficiencies in the current regime. In this white paper, we will address many of the same topics raised in the November Notice and comment on the differences between the thesis of this paper and the path proposed by the FCC.

Recent proposals to reform the seriously-ailing intercarrier compensation regime adhere to the key principle that charges for call termination should be set uniformly at a

[1] FCC, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 01-92, WC Docket 05-337, CC Docket No. 96-45, etc., November 5, 2008. (Hereafter "November Notice")

rate no higher than incremental cost, or in the alternative a bill-and-keep regime should be adopted. We agree with that principle and suggest a simple creed for intercarrier compensation reform: *Intercarrier compensation shall not be a profit center.*

Many of the ILECs' proposals for intercarrier compensation reform, however, come with "a catch." They propose that ratepayers (their own and their competitors') make up any loss of revenue from reductions in intercarrier compensation rates. Also, some proposals include a make-whole fund to offset revenue losses caused by reductions in access lines and access usage experienced by the incumbents (either as a result of competitive inroads or an overall decline in the demand for wireline narrowband service.) And although it is hard to put a price tag on the size of the make-whole guarantee, it could certainly amount to billions of dollars a year, if applied to all ILECs. Over the expected decade or longer lifetime of a major regulatory decision, this would amount to tens of billions of dollar.

One example of the "make-whole" feature of the reform plans is the proposal by OPASTCO to create a supplemental interstate common line support (ICLS) mechanism, which would be "automatically available for carriers that are currently under rate-of-return (RoR) regulation in the interstate jurisdiction without any other conditions applying, particularly those related to the way a carrier is regulated in the state jurisdiction."[2] The supplemental ICLS would have two components. The first would compensate the RoR ILECs for all revenues lost as a result of mandated reductions in access charges, not otherwise recoverable from increases in SLCs. The second would provide compensation for "unrecoverable revenue losses attributable to losses in access lines and interstate and intrastate minutes of use, using 2008 as a base year."[3]

The November Notice does not propose consideration of a similar bailout for the price cap carriers.[4] However, as late as September of this year, Verizon and AT&T proposed the establishment of a "Replacement Mechanism," which would extend the

[2] OPASTCO, *Ex Parte Notice,* October 29, 2008, CC Docket No. 01-92, WC Docket 05-337, CC Docket No. 96-45, also included within Appendix D to the November Notice.

[3] Id, at 2.

[4] The price cap carriers are allowed to increase subscriber line charges (SLCs) to offset reductions in access charges without demonstrating that these increases are necessary to recover costs or offset implicit subsidies.

make whole support to price cap carriers. The purpose of this fund (along with increases in end-user charges) was "to give providers the opportunity to recover revenues that they have previously collected through access charges."[5] Importantly, the primary cause for this new regulatory bailout does not appear to be any action taken by the regulatory agencies (as it has been in the past), but rather the "very real threats" to access revenues posed by the loss of access lines and the "various arbitrage schemes." As stated very clearly and succinctly by Verizon, "in the face of these pressures on access revenues, the Replacement Mechanism is designed to provide carriers with a more predictable and reliable source of support."

The "make-whole" mechanism appears as an integral part of the ILECs' intercarrier compensation reform package as a matter of course, rather than a result of a clearly expounded policy. "Make whole" appears as part of the natural order of the telecommunications world, which lamentably it has been. For decades, the ILECs have never had to justify the "make-whole" concept, in spite of the radical changes in the regulatory and business environment. The recent November Notice, which restricts the make-whole provisions to RoR carriers only, is a refreshing change from the attitudes and practices of the past.

The purpose of this white paper is to bring the "make-whole" issue out into the open and question the unquestionable: Do the ILECs need to be made whole in response to changes in the market or requirements to set non-discriminatory rates? Before discussing the make-whole issue, however, we will address the economics of intercarrier compensation pricing. The November Notice presented a new proposal on the costing standard for intercarrier compensation, and it is an important issue that we have studied for many years.

Following this digression on pricing issues, we examine the make-whole issue from a conceptual and empirical standpoint. Since the make-whole concept is deeply rooted in "ancient" history we first review that history and then demonstrate that the make-whole paradigm is an anachronism, which has now become a myth. Following

[5] Letter to Chairman Martin and Commissioners by Susanne Guyer, Senior Vice President – Federal Regulatory Affairs, Verizon, CC Docket No. 96-45, September 12, 2008, at 5.

this discussion, we analyze the ILECs' justifications for a new make-whole mechanism. The three major themes we examine are:

- Make-whole is an entitlement of the regulated ILECs, premised on the need to keep the monopoly provider financially healthy.
- Make-whole is needed to fund future investments in the infrastructure.
- Make-whole is needed to compensate the ILECs for assuming the carrier-of-last resort obligation.

1. THE PRICING STANDARD FOR INTERCARRIER COMPENSATION

Interconnection is essential in any communications marketplace where customers are served by multiple, competing carriers. Without interconnection, one network's customers are unable to communicate with another carrier's customers. In markets where one firm has a disproportionate share of the market, however, the dominant firm will have the upper-hand in any interconnection negotiation. Indeed, under the conditions now present in voice markets, the ILECs have the incentive and ability to raise the price and degrade the quality of interconnection provided to their competitors. Regulatory authorities must prevent this from happening by requiring the dominant firms to establish fair and reasonable interconnection policies. This is the most important role for government in this transition between the old monopoly world and the competitive market of the future.

Interconnection fees are a cost of doing business for competitive voice service providers. Therefore, if interconnection fees are set above cost, the voice providers will have to increase prices to consumers.[6] This will harm consumers directly and potentially disrupt the transition to fully effective competition in the voice market.

The most important pricing element of interconnection is the rate charged for call termination. (And although we will address only this component, it is still critical for the Commission to regulate transit rates and other interconnection fees to prevent an

[6] A voice provider will also receive revenue from an ILEC for terminating traffic originated by the ILEC's end users, or a credit to offset termination fee obligations. In some cases, such as when the CLEC serves a proportionately greater share of residential customers, the net of the two obligations would require the competitor to pay the incumbent ILEC.

ILEC's exercise of market power.) Economic theory dictates that this rate should be set at the incremental cost imposed on the terminating network by carriage of the originating carrier's traffic. As the Commission points out in the November Notice,[7] the standard set forth in Section 252 (d)(2)(A) of the Act requires that rates for reciprocal compensation (i.e., local call termination) should be based on the "additional cost of terminating such calls."[8] The Commission highlights the distinction between Total Element Long Run Incremental Cost (TELRIC) and the long run incremental cost (LRIC) of a service provided by a multiproduct firm, noting that LRIC is a better representation of the statutory standard.[9]

The TELRIC standard, which was established in 1996, is based on forward looking costs of the entire quantity of the element provided, including any fixed costs associated with this element. For example, the TELRIC cost of the switching functions (non-traffic sensitive plus traffic sensitive) would encompass the cost of the switch frame, processor, and matrix, along with associated land and building costs. In addition, the Commission required that the TELRIC cost estimates included an allocation of the common costs of the firm, even though common costs are not an identifiable incremental cost of the element.

The alternative measure of cost now proposed by the Commission – LRIC – is distinctively different from TELRIC in a number of ways. First, as the Commission points out, LRIC is conceptually a better measure of the lower-bound of a subsidy-free price, as shown in the analysis developed by Faulhaber, Baumol, and others.[10] In other words, so long as the customers of a multi-product firm's service pay the incremental costs that their service adds to the cost of the firm, they will not be subsidized by other services. Second, LRIC unequivocally removes any of the forward-looking common costs that were added to TELRIC (and often are assumed to be included in TELRIC). This is proper, because the common costs, by their very nature, are not incremental to the call termination service provided by an ILEC or competing carrier. Third, LRIC will

[7] November Notice, Appendix C ¶232.
[8] 47 U.S.C. §252(d)(2)(A).
[9] November Notice, Appendix C ¶244.
[10] See, Gerald R. Faulhaber, *Cross-Subsidization: Pricing in Public Enterprises*, 65 AM. ECON. REV. 966, 966-77 (1975).

exclude any of the switch costs that are non-usage sensitive. This will clear up any confusion that exists under the current TELRIC methodology arising from the need to allocate switch costs between traffic sensitive and non-traffic sensitive elements. With LRIC the conceptual test for whether to treat a cost as traffic sensitive is whether the *incremental traffic would increase the cost of the switch on a going forward basis.*

The LRIC costs of call termination are well below the $.0007 mirroring rate for reciprocal compensation, which is often used as a proxy for cost-based termination rates. The more recent estimates provided by the TELRIC models, such as the HAI model, are well below $.0007 – in the range of $.000295 cents per minute.[11] Further, as explained in the November Notice, it is even questionable whether any of the switch costs are truly traffic sensitive.[12] And if we look exclusively at forward-looking technology, such as soft switches, TELRIC costs are likely in the range of zero to a maximum of $.00024 per minute.[13]

In sum, reform of intercarrier compensation should lead to reductions in the rates for most categories of call termination. For most carriers, intrastate access charges must fall the most, followed by interstate access charges and finally by reciprocal compensation rates that are above the to-be-determined LRIC of call termination. Finally, as an alternative, many economists regard a "bill-and-keep" regime, whereby carriers recover all of their costs only from their own customers, as superior to the more traditional calling-party-network-pays ("CPNP") regime.14 The basic argument is that

[11] Minnesota Public Utilities Commission, Staff Briefing Papers, August 7, 2003, http://www.puc.state.mn.us/docs/briefing_papers/b03-0088.pdf
This document discusses a decision by the Minnesota PUC to set call termination rates at zero based on the determination that carriers "do not incur usage-based costs for switching." (at 4) It also reports the call termination costs on a minute of use basis, derived from the HAI 5.2a cost model. (at 6)

[12] November Notice, Appendix C ¶250. Also see, See, Joint Direct Testimony of Joseph Gillan and Richard Chandler, on behalf of AT&T Communications of the Pacific Northwest, Inc, and WorldCom, Inc., Before the Washington Utilities and Transportation Commission, Docket No. UT-023003, June 26, 2003.

[13] November Notice, Appendix C ¶252, citing to AT&T October 4, 2008 *Ex Parte* Letter.

[14] See, DeGraba, Patrick, 2002, "Central Office Bill and Keep as a Unified Inter-Carrier Compensation Regime," *Yale Journal on Regulation*, 19 (1) pp. 39-84; DeGraba, Patrick, "Efficient Intercarrier Compensation for Competing Networks When Customers Share the Value of A Call," *Journal of Economics & Management Strategy*, 2003, vol. 12, issue 2, pages 207-230

the terminating party is in a better position to constrain his or her own carrier from imposing excessive prices for call termination. Perhaps it is time for the FCC to reopen its investigation of "bill-and-keep," which it studied carefully in the past and found that it offered many significant benefits.[15]

2. DEBUNKING THE MYTH THAT MAKE-WHOLE IS AN ENTITLEMENT

Regulated firms are made whole by offsetting decreases in one set of rates with increases in another set of rates, sufficient to maintain the exact same level of revenues. The make-whole paradigm originates with traditional rate-of-return regulation practiced by the state utility commission and the FCC starting in the 1930s. The traditional rate case conducted by state commissions consisted of two distinct phases.[16] First, the commission determined the overall allowed (or targeted) level of total revenues. This phase was termed a revenue requirements determination, and included analysis of the operating costs and capital outlays of the firm and a determination of the allowed return (and depreciation) on the rate base. This was an intensive and adversarial process, which could last for many months and involved discovery and lengthy hearings. Once the revenue requirements were determined, the rates for individual services were set to yield the targeted level of revenue in the "test" year, i.e., the year in which the rates would be in effect. Hence, the rates for individual services could be adjusted upward or downward so long as the total revenues that the rates were expected to produce did not exceed the overall revenue requirement. If a rate for one service was lowered, the rates for other services would be raised to offset the reduction in revenues from the first service. This is where the concept of "revenue-neutrality" originated, and the practice of make-whole ratemaking got its start.

State and Federal regulators have steered very far from traditional rate-of-return regulation. State commissions have substituted "incentive regulation" for rate-of-return regulation over the last twenty years. The FCC has substituted price caps for rate-of-

---

[15] Federal Communications Commission, Notice of Proposed Rulemaking, CC Docket No. 01-92, Released March 3, 2005

[16] The FCC has not undertaken a full-fledged rate case for many decades.

return regulation for ILECs providing service to all but eight percent of telephone customers.[17] Major ILECs have not been subjected to a rate case in decades, and indeed price caps or price freezes were imposed in most cases without any analysis of the rate base or expenses of the ILEC.

Given the passage of time since revenue requirements were last established, therefore, there is no basis for assuming or assigning to ratepayers or competitors an obligation to make an ILEC whole. During the last two or three decades, the industry has evolved dramatically. The ILECs' costs have fallen, the prices of regulated services have been only loosely constrained, and the revenues received from the ILECs' customers have increased due to the increased sales of bundles of regulated and unregulated services. Indeed, the chasm between the revenues received from the ILECs' local exchange customers (let alone the revenue potential from the new services being offered) and the *revenue requirements* of a traditional rate case is so large, as to undermine any argument that the ILECs are entitled to be made whole, relative to current levels of revenue from regulated services.

While the make-whole myth should collapse on its own, it appears to have some life left to it. Therefore, we present statistics on the ILECs' financial status, which proves the traditional concept of the revenue requirement no longer applies to today's ILECs. First, we examine how the ILECs are shifting increasing amounts of their operations into non-regulated activities. The ILECs' success in the non-regulated arena is a direct result of their historic local exchange monopoly and their continuing relationships with their local customers. To the extent non-regulated revenues are "offsetting" regulated revenues, there is no basis for forcing some group of captive ratepayers, taxpayers, or competitors to make-whole the regulated part of the ILEC.

Second, we analyze how the ILECs have benefited from the lack of meaningful adjustments to their price caps. Over the past several years, price caps have remained the same in nominal terms (the same dollar amount). Since inflation has been at record lows and the ILECs have not been forced to offset productivity gains with price

[17] *Trends 2008*, Table 7.2

reductions, the price caps have been very generous to the ILECs. As a result, the ILECs have earned supranormal returns on capital, even on their regulated books of account. Any additional profits earned on non-regulated services are icing on the cake.

The November Notice marks a significant departure from the use of the make-whole paradigm for price cap carriers. We still believe it is important, however, to provide information on the price cap carriers' financial performance. As an initial matter, the FCC's proposal has not been adopted by the Commission, and it would be premature to declare victory on this issue. The make-whole myths are powerful and will not die easily. Also, lessons from the price cap carriers are instructive for the so-called rate-of-return carriers. If the FCC were to adopt the OPASTCO proposal and provide supplemental ICLS to carriers that are RoR regulated in the interstate jurisdiction, without regard to how they are regulated in the state jurisdiction, then their intrastate performance may well mirror the experience of the completely price capped carriers.

The distinction between price cap carriers and RoR carriers is not as clear-cut or as sharply drawn, as one might expect. Rate of return regulation governs the operations of many mid-sized companies. As shown in the table below, average schedule companies – the smallest of the ILECs – account for only 2.1 million of the 11.7 million loops under interstate RoR. Many of the other loops subject to rate of return regulation are provided by one of the mid-sized ILEC holding companies. As shown in the table below, the mid-sized ILEC holding companies must be providing a substantial number of RoR loops. This can be seen by comparing the "cumulative" column to the total number of RoR loops. Even if we assign all of the RoR loops in ascending order to the smallest ILEC holding companies, the total would not be exhausted until we reach the seventh largest company – Citizens Communications Company. And indeed, it is factually true that a significant number of local loops provided by mid-sized carriers, such as CenturyTel and TDS, are subject to interstate rate of return regulation.

Holding Companies	Loops	Cumulative
AT&T Inc.	65,669,563	146,848,926
Verizon Communications Inc.	45,524,091	81,179,363
Qwest Communications International, Inc.	13,066,748	35,655,272
Embarq Corporation	6,603,481	22,588,524
Windstream Corporation	3,014,037	15,985,043
CenturyTel, Inc.	2,065,242	12,971,006
Citizens Communications Company	2,001,652	10,905,764
Cincinnati Bell	814,120	8,904,112
TDS Telecommunications Corporation	619,888	8,089,992
Hawaiian Telecom Communications, Inc.	586,201	7,470,104
Commonwealth Telephone Enterprises, Inc.	298,947	6,883,903
Alaska Communications Systems	240,814	6,584,956
Iowa Network Services, Inc.	240,796	6,344,142
FairPoint Communications, Inc.	239,994	6,103,346
Consolidated Communications, Inc.	219,929	5,863,352
Madison River Telephone Company	164,179	5,643,423
Comporium Communications	139,126	5,479,244
D&E Communications, Inc.	129,313	5,340,118
Surewest Communications	121,615	5,210,805
CT Communications, Inc.	107,989	5,089,190
North State Communications Corporation	107,530	4,981,201
Horry Telephone Cooperative, Inc.	93,706	4,873,671
Hargray Communications Group, Inc.	75,384	4,779,965
Virgin Island Telephone Company	68,130	4,704,581
North Pittsburgh Telephone Company	65,270	4,636,451
Guam Telephone Authority	62,640	4,571,181
Matanuska Telephone Association, Inc.	61,203	4,508,541
Famers Telephone Cooperative, Inc. (SC)	55,089	4,447,338
Pioneer Telephone Cooperative (OK)	52,666	4,392,249
Hickory Tech Corporation	51,788	4,339,583
Lynch Interactive Corporation	51,715	4,287,795
Ntelos, Inc.	43,485	4,236,080
Atlantic Telephone Membership Corporation	42,813	4,192,595
Golden West Telecommunications Cooperative, Inc.	41,977	4,149,782
Guadalupe Valley Telephone Cooperative, Inc.	41,961	4,107,805
Twin Lake Telephone Cooperative Corporation	37,607	4,065,844
SRT Services Corporation	37,605	4,028,237
Skyline Telephone Membership Corporation	36,153	3,990,632
East Ascension Telephone Company, LLC	35,933	3,954,479
All Other Companies	3,918,546	3,918,546
Total	**146,848,926**	

Average Schedule	2,135,935	
Other Rate of Return	9,514,224	
Total Non-Price Cap Loops		11,650,159
Total Price Cap Loops		135,198,767

Source: Trends 2008, Tables 7.2 and 7.3

Rapid Growth in the ILECs' Unregulated Revenues

The ILECs' revenues from unregulated services and newly provided regulated services have increased substantially since the inception of price caps in 1991. The growth has come from data services, video services, and long distance services – often provided as a bundle to their subscribers. The large ILECs report significant revenues from the provision of these non-traditional and non-regulated services to residential customers. AT&T, for example, reports that in California only 10.8% of its billed residential revenues were for basic service without additional bundled services from AT&T or its affiliate.[18] Verizon reports a year-over-year 53% increase in broadband and video revenues, which are reflected in average revenue per user ("ARPU") of $63.76.[19] The ARPU among FiOS customers is more than $130 per month. FiOS TV and Internet have been growing rapidly and are poised to grow even more as Verizon has increased its triple play coverage from 22% to 60% over last year.[20]

Interestingly, the large ILECs' financial reports to the FCC show little evidence of this rapid growth in unregulated revenues – even though these services are provided over the same local exchange facilities as the traditional services and are usually sold on a bundled basis with local exchange service. The large ILECs – Verizon, AT&T, and Qwest – report low growth in unregulated revenues over the last few years. Unregulated revenues were 6.5% of total ILEC revenues in 2004 and only 9.2% in 2007. These data do not reflect the extent of unregulated activities of these companies. Regulatory accounting (USOA) requires companies to report revenues and costs only for unregulated activities operated by the ILEC entity. Most of the large ILECs' unregulated activities, however, are run outside of the ILEC corporate entity. There is no formal reporting to regulatory authorities of the revenues and costs of these unregulated operations, despite the fact that the unregulated services are often sold in bundles together with regulated phone service. As a result, regulators typically do not examine a

[18] Interim Opinion Adopting Reforms to the High Cost Fund-B Mechanism, Public Utilities Commission of the State of California, Decision 07-09-020 September 6, 2007, at 37 (citing to AT&T Comments of 4/27/07 at 3)

[19] Verizon, 2nd Quarter 2008 Earnings Conference Call, http://investor.verizon.com/news/20080728/20080728.pdf

[20] Id.

complete picture of the ILECs' financials when they consider whether the implicit or explicit subsidies for "universal services" are really necessary to enable customers to receive telephone service at reasonable rates. As we shall explain below, the increase in revenues from unregulated services has reduced the need for subsidies of any sort to ensure that telephone service will be available at reasonable rates.

Although it is impossible to determine the precise size of these unregulated operations, it is possible to glean some information by comparing the USOA books of account to the books of account reported by the parent corporations to the Securities and Exchange Commission. Verizon Corporation reports results separately for its wireline and wireless segments. The wireline segment includes voice, Internet access, broadband video and data, next generation IP services, network access, and long distance. These services are provided to consumers, businesses, and government, both domestic and international. Total revenues, net plan, and investment in new plant and equipment for the last two years are shown in the table below for the entire wireline segment of the corporation, and then separately for the regulated Verizon and the unregulated entities.

Verizon Financial Results

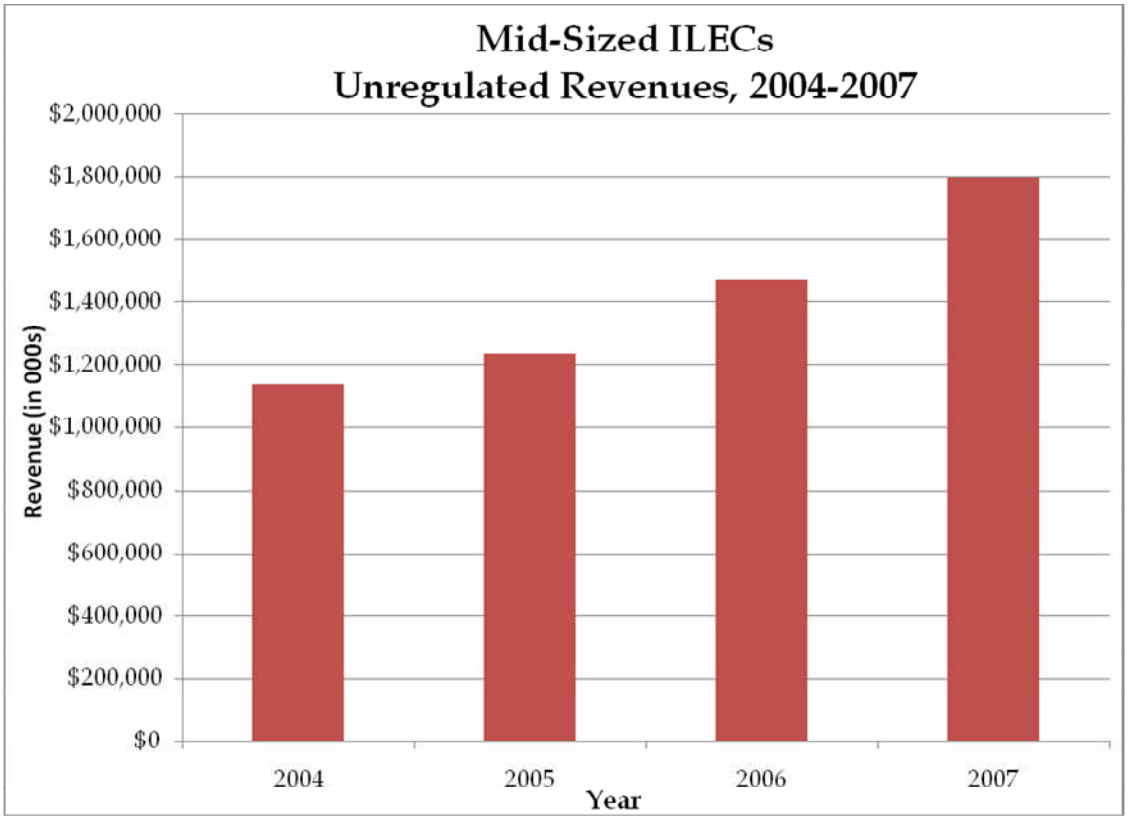
	Corporate All Wireline	Regulated Entities	Unregulated Subsidiaries
2007			
Revenues	$50.3	$29.6	$20.7
Net Plant	$58.7	$34.3	$24.4
Annual Investment	$11.0	$4.6	$6.4
2006			
Revenues	$50.7	$31.5	$19.2
Net Plant	$57.0	$41.0	$16.0
Annual Investment	$10.3	$7.1	$3.2

Note:
Amounts are in billions of dollars
Sources:
Verizon wireline data from 10K Reports
Regulated revenue from ARMIS 43-01
All other regulated data from ARMIS 43-02, Table B-6

What emerges from the Verizon financial data is that its unregulated activities are the growth business of the company. The regulated subsidiaries of Verizon account for 60% of Verizon's total wireline revenue and 30% of total corporate revenue (since wireless revenues account for about 50% of total corporate revenue). The size of the regulated rate base is shrinking rapidly and investments are shifting markedly toward the unregulated operations. In 2007, of the $11 billion of new investment, only $4.6 billion (42%) went to the regulated entities. As we point out later on, the ILECs' appetite for new investment in traditional local exchange service has diminished – and is more than amply funded by their cash flow from regulated services.

The mid-sized carriers (e.g., Embarq, CenturyTel, Windstream, and Citizens Communications) provide more unregulated services through their ILEC entities than the large ILECs. This is reflected in their ARMIS reports, which show unregulated

revenues growing from 11% of total revenues in 2004 to 18% of total revenues in 2007. The same trend can be seen in the revenues earned by the large RoR companies. TDS reports almost 17% of its ILEC revenues come from the category of "miscellaneous services," which appears to correspond to unregulated activities.[21] The trend in unregulated revenues is shown in the chart below. These companies also earn additional revenue from unregulated services offered by their affiliates. For many ILECs the growth in unregulated revenues has more than offset reductions in regulated revenue.



This evidence supports the concept behind the FCC's proposal that the price cap ILECs must disclose their unregulated revenues and costs when seeking universal

[21] Telephone and Data Systems, Inc., Annual Report to Shareholders for the Year Ended December 31, 2007, at 23-24. The report defines miscellaneous revenues as "charges for providing Internet services; selling, installing and maintaining customer premise equipment; providing billing and collection services; and selling of direct broadcast satellite service and other miscellaneous services."

service funding.[22] The November Notice endorses the policy principle adopted here not to make the ILECs' whole, stating: "Thus, rather than guaranteeing revenue neutrality, as some commenters propose, we take steps here to ensure that any new universal service subsidies are targeted carefully to situations where they are crucially needed."[23] Admittedly, it will be difficult to turn this goal into reality and assign credit to ratepayers for the profits earned from unregulated activities. Nevertheless, the alternative of ignoring this "500 pound gorilla in the room"[24] is an invitation to putting an unfair and unnecessary tax on ratepayers.

Our discussion of the ILECs' unregulated activities also highlighted the growth being experienced by ILECs at least partially subject to rate of return regulation. We disagree on policy grounds with the Commission's proposal to treat the interstate rate-of-return carriers as a "special situation."[25] The issue of whether USF funds or a new revenue replacement mechanism is necessary must take into consideration the potential that a large number of customers in rural areas spend well upward of $60 for bundles of regulated and unregulated services provided by their ILEC. Unless the revenues and costs of these activities were subjected to a full rate-case type of analysis, there will be no accountability for the need and use of the subsidies. This will exacerbate the problems -- identified by the General Accountability Office -- that were created by the absence of performance goals and measures needed "to make informed decisions about the future of the high-cost program." [26]

Low inflation benefits the ILECs

As explained above, price caps on interstate services and price controls on intrastate services have not been adjusted properly for productivity gains over the past several years or even longer. The price cap plan on interstate services originally

[22] November Notice, Appendix C, ¶309.
[23] Id., ¶308.
[24] Id., citing Free Press October 13, 2008 *Ex Parte* Letter at 6.
[25] Id., ¶312.
[26] United States Government Accountability Office, *FCC Needs to Improve Performance Management and Strengthen Oversight of the High-Cost Program,* Report to Congressional Committees, June 2008.

included an explicit productivity offset of as much as 6.5%.[27] Price cap-regulated rates were forced down over time by the amount of the productivity (or X-) factor minus the level of inflation. Thus, if the X-factor was set at 6.5% and inflation was 2.5%, then nominal rate cap was reduced by 4.0% a year. Under the CALLS plan, the mechanism for adjusting the price caps was changed.[28] During a transition period, switched access rates were lowered to either 0.55¢/minute for the RBOCs, 0.65¢/minute for other price cap carriers and 0.95¢ for "primarily rural" price cap carriers.[29] Once these rate levels were reached, the rates were frozen in nominal terms. Special access rate caps were also frozen in nominal terms, beginning in 2003. The effect of this freeze in nominal rates was to allow rates to increase in real terms, i.e., inflation-adjusted, to the extent that inflation was less than the underlying productivity improvements achieved by the ILECs. The FCC did not say that the actual productivity gains of the ILECs would equal the inflation rate, but rather washed its hands of the matter, claiming that "we believe that increased competition will serve to constrain access rates in the later years of the CALLS Proposal…"[30]

The benefit to the ILECs of the FCC's price cap regime is most pronounced for special access services. ILEC sales of special access service have grown very rapidly over the last several years for two reasons. First, market demand for special access has grown because of its use for business customers' data services. Second, competition in the special access market has failed to materialize, as the FCC predicted in 2000. Considering the technological advances in these highly capital-intensive services and the substantial economies of scale realized by the ILECs, the nominal price caps on special access are a particularly good deal. As shown below, special access revenues of the large ILECs have more than tripled over the last ten years. Special access has become a bigger source of revenue for these ILECs than switched access services from interstate and intrastate jurisdictions, and has more than offset any decline in switched access

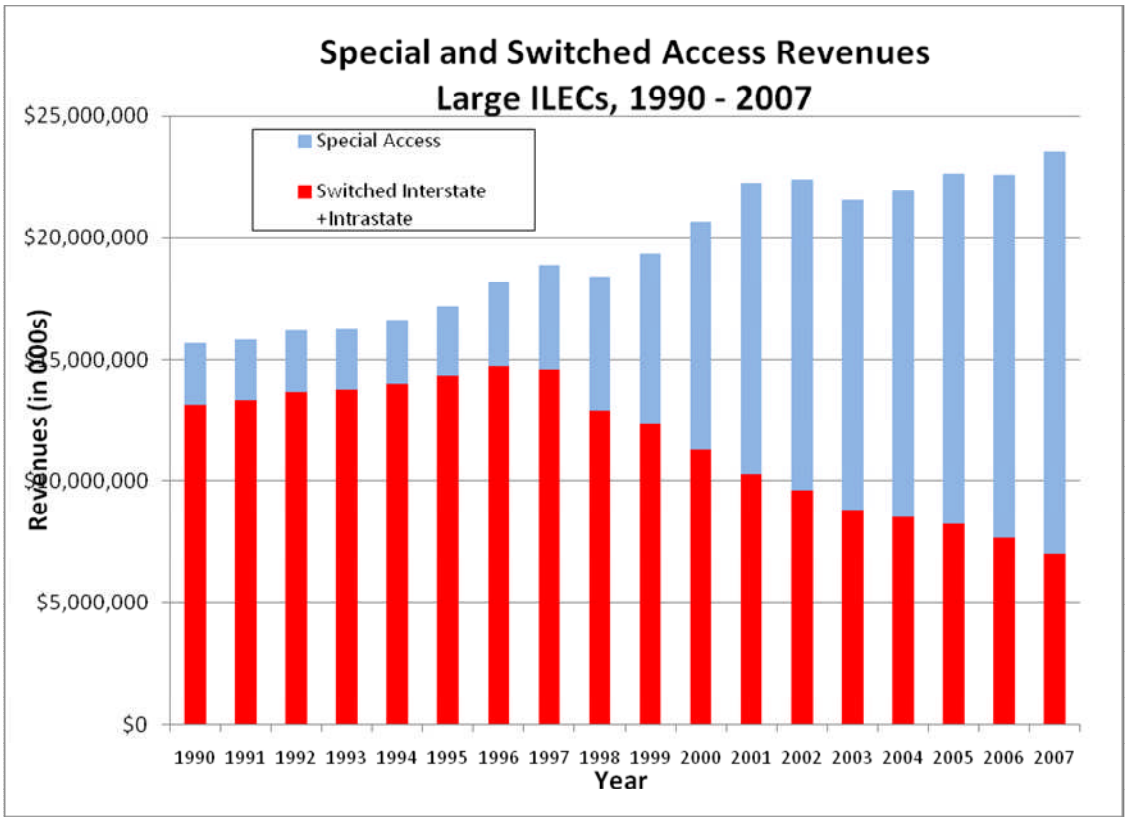
[27] 1997 Price Cap Review Order, 5 FCC Rcd at 6789. The 6.5% factor was challenged in the courts and vacated. Nevertheless, since the CALLS plan obviated any further analysis of this issue, we are using the FCC's prior analysis to estimate the potential effects of a nominal price freeze.

[28] Sixth Report and Order in CC Docket Nos. 96-262 and 94-1, May 31, 2000.

[29] Id, ¶162.

[30] Id. ¶166.

service revenues.[31] Hence, the large ILECs have achieved a "make-whole" outcome even without accounting for unregulated services' revenue.

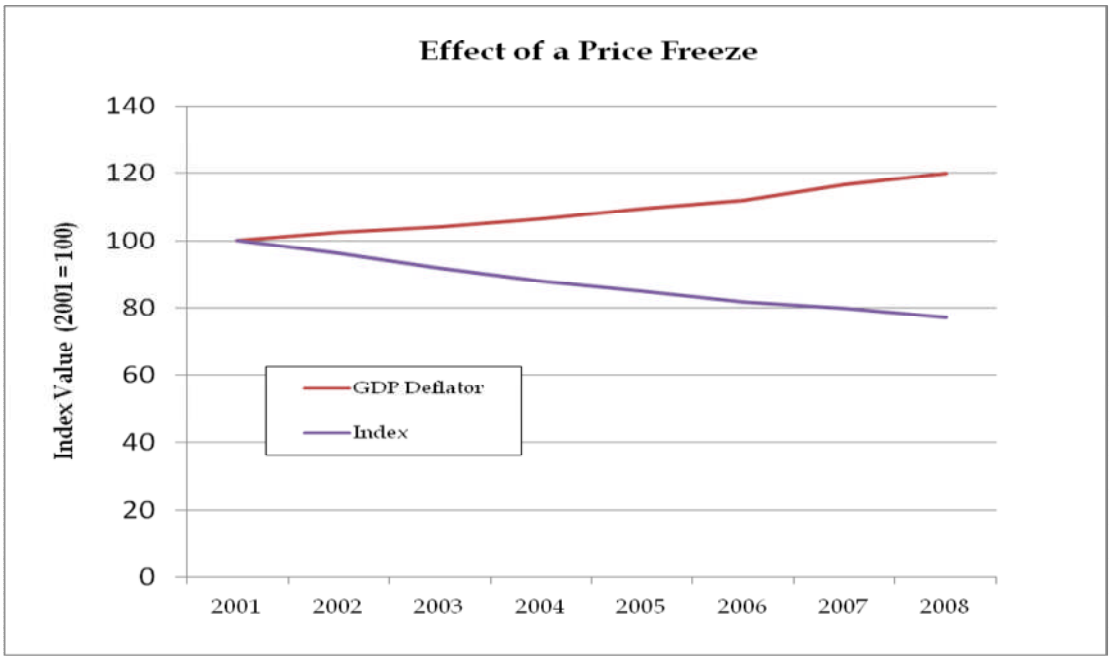


Incentive regulation plans adopted by the state commission often did not include productivity factor adjustments. In many cases, local rates were frozen in nominal terms for an extended period of time. This, too, had the effect of allowing rates to increase in real terms to the extent the underlying productivity improvements achieved by the ILECs in local exchange markets exceeded the inflation rate.

The past and present benefit to the ILECs from nominal price caps can be gauged by comparing the inflation rate for the last several years to a 6.5% productivity factor. The chart below shows how much nominal price caps would have to fall to offset productivity gains during a period of low inflation. For example, over the course of six

[31] This measure of switched access charge revenues excludes the end user common line charge, which is not paid by carriers.

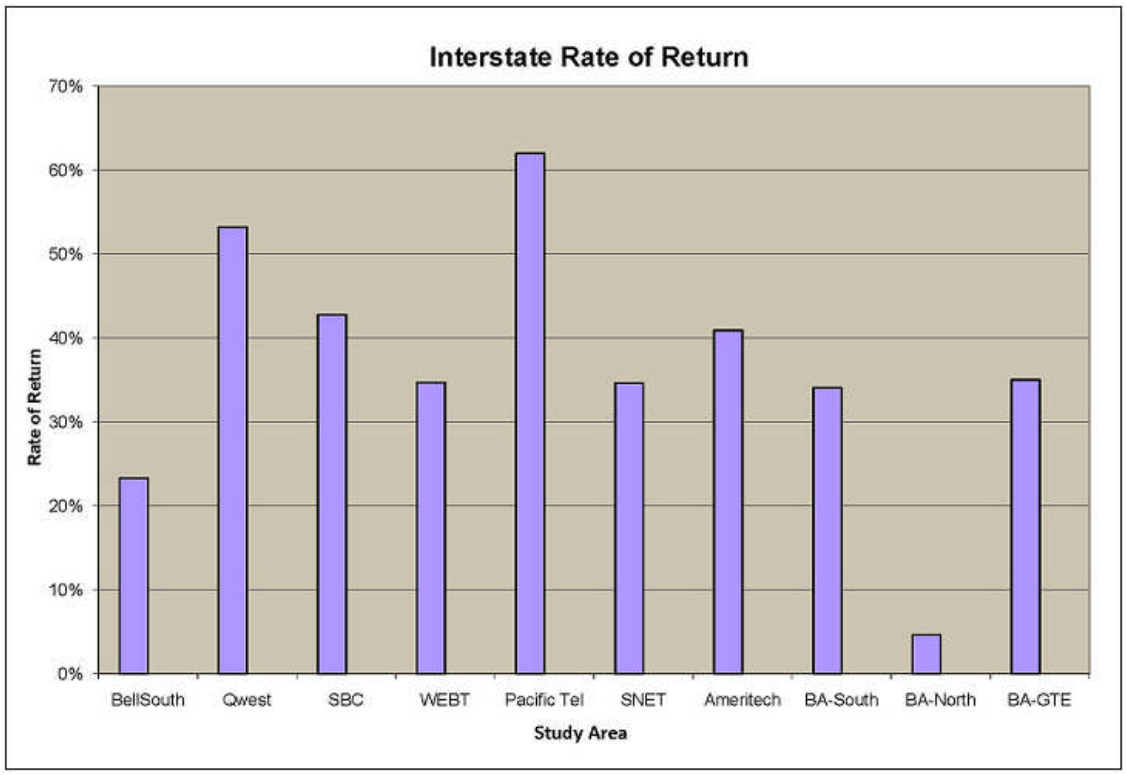
years, with inflation running at 2.5% a year, price caps should have fallen by 20% to offset the gains in productivity.



Regulated returns exceed the cost-of-capital

We also evaluate the ILECs' demand to be made whole using a traditional, and somewhat out-dated, regulatory tool. In an actual rate case, an ILEC would not be entitled to offset revenue declines in one service with rate increases for other services, unless its total revenues from regulated services would be insufficient to yield an expected rate of return that would fall below the cost of capital. This old paradigm does not fit today's circumstances, as explained in the prior sections. ILECs are not rate-of-return regulated for the most part, and regulatory accounts do not capture important financial characteristics of the firms (such as their unregulated activities). Therefore, low rates of return on regulated assets, by themselves, should not justify a make-whole payment. Nevertheless, it is hard to justify make-whole payments to ILECs whose regulated rates of return are far above their cost of capital. There should be some threshold level of return above which the ILECs' claim to be made-whole would lose any traction.

Interstate rate of return for all but one of the major RBOC operating regions exceeded 20% in 2007, as shown in the figure below. This is substantially larger than the 11.25% rate of return last set by the FCC in 1990 and even more out of line with more recent determinations of the cost of capital.[32]



Rates of return for some companies in the intrastate jurisdictions are lower. However, many ILECs' unseparated (combined interstate and intrastate) rates of return are well above the cost of capital. For example, AT&T's rate of return nationwide from its regulated activities was 17.8% in 2007. This is approximately twice as high as the cost of capital set by state commissions in the last few years. The California PUC, for example, recently determined that the cost of capital for AT&T was 9.44%. We can demonstrate (as shown in the chart below) that AT&T would have to cut rates across-the-board by 13% if it were forced to meet a targeted 9.44% rate of return. This indicates that AT&T could lose substantial intercarrier compensation without triggering an offsetting rate increase in a traditional rate-of-return case.

[32] See, Before the Public Utilities Commission of the State of California, Decision 04-09-063m September 23, 2004, which set a combined cost of capital of 9.44%.

AT&T Total Company - 2007

Earned ROR = 17.83%
If Targeted Cost of Capital = 9.44%
Excessive return = 8.39%
Average Net Investment = $37.4 billion
Excessive Earnings = $3.1 Billion
Excessive Earnings and Taxes = $5.2 Billion
Implies that Revenues Could be 13% Lower

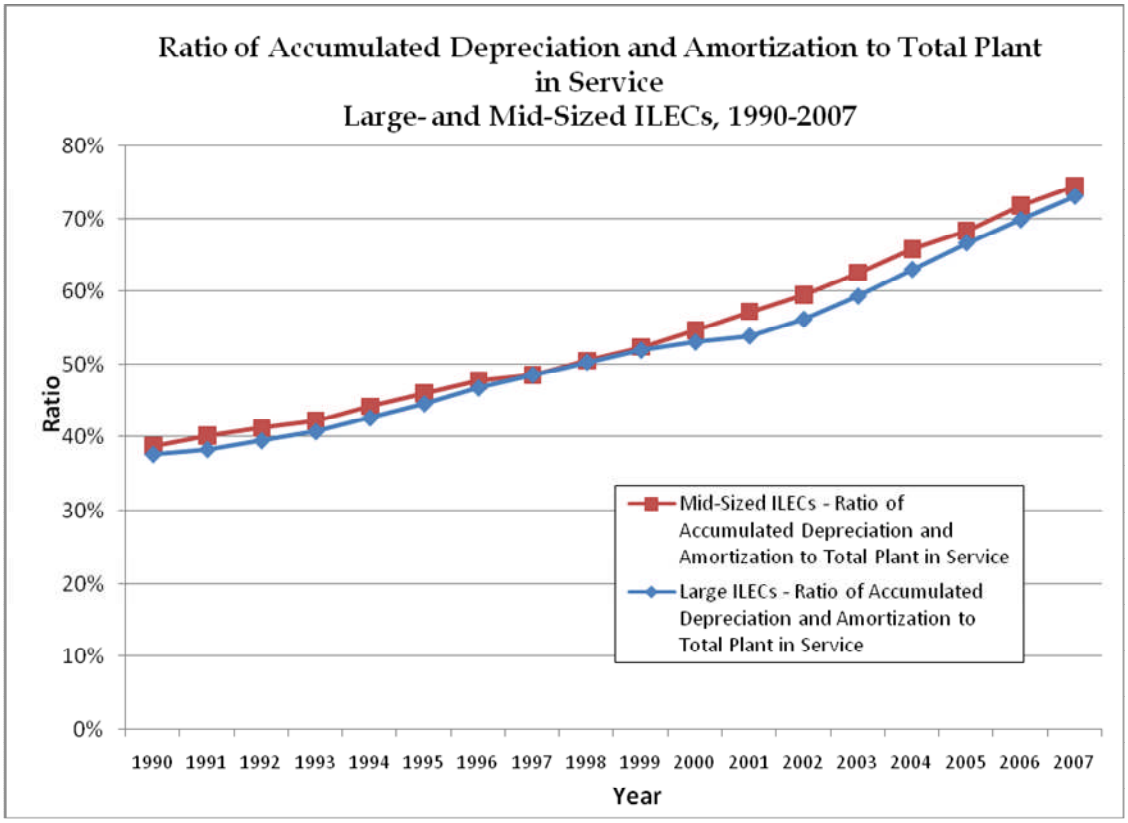
The large ILECs are not the only local exchange providers with high reported regulatory earnings. Century Telephone for example, which operates in many rural areas, reports in 2007 rates of return by study area ranging between 12.5% and 31%. Again, while this is not the end of the story, because many accounting rules affect calculations of the regulated rate of return, to the extent the ILECs appeal to a make whole doctrine this should be seen in the context of their reported rates of return.

3. DEBUNKING THE MYTH THAT CASH IS NEEDED TO FUND INVESTMENT IN INFRASTRUCTURE

One of the major rationales relied on by the ILECs to justify the excessive rates for intercarrier compensation and the need for a "make-whole" mechanism to offset any losses in access charges is the claim that in the absence of adequate funding they will be unable to continue investing in the telecommunications infrastructure. For example, the ITTA in its recent ex parte presentation entitled "Proper Compensation and Support for Networks Serving Rural America," highlights how their proposal, which sets higher rates for call termination than the large ILECs and imposes higher rates on IP-traffic, "promotes infrastructure investment and maintenance."[33]

It is instructive to see how the rhetoric about infrastructure investment compares to the facts. The balance sheets of the regulated ILECs have never been stronger. Changes in the accounting rules made in the mid-1980s permitted the ILECs to accelerate depreciation of their network. As a result, the ILECs were allowed to recover sooner a much larger portion of the costs of building their network from their ratepayers. As we show in the two graphs below, after nearly two decades of stepped-up depreciation, the large and mid-sized ILECs have recovered nearly 75% of the total cost of their networks now in service.

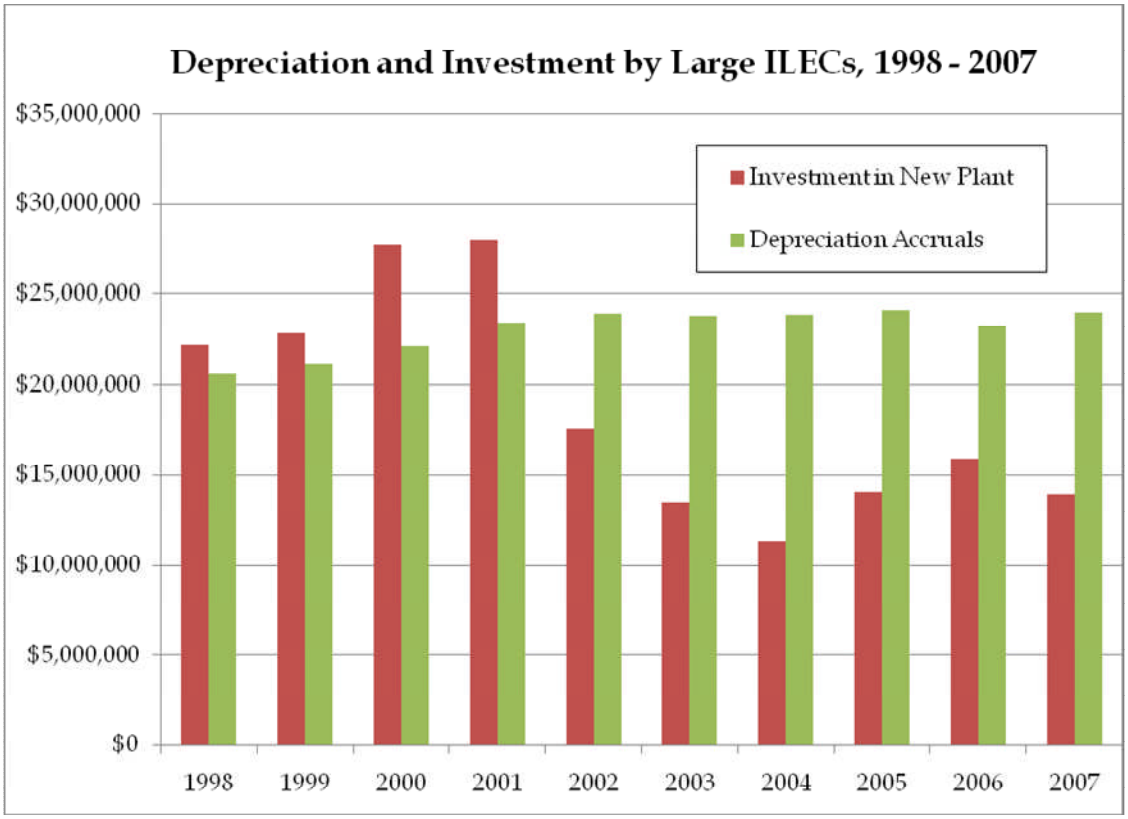
[33] Independent Telephone & Telecommunications Alliance, Ex Parte Presentation, CC Docket No. 01-92, September 2008



The large ILECs' customers have already paid for the lion's share ($270 billion) of the $370 billion in network investment. As a result, the net investment (the network not yet paid for) has declined to less than $100 billion, compared to over $150 billion only five years ago. This means that the ILECs have substantial accounting reserves to fund new investment, and could replace or add to their existing network, without increasing rates to customers, or obtaining new funding from make-whole subsidies.

We can also see the surfeit of funds for infrastructure investment by looking at the ILECs' cash flow. The ILECs generate internally far more cash than they need to fund their current level of network investment. The first source of this cash is the depreciation accruals, which represent about 25% of the total costs that are passed through each year to ratepayers. Over the last six years, the large ILECs have spent about 60% of these accruals on plant investment. The remaining 40% is used by the ILECs for other purposes. By comparison, during each year between 1998 and 2001, the

level of investment exceeded depreciation accruals. We show the pattern of use of the depreciation accruals over the last decade in the graph below.



Annual depreciation accruals are not the only source of cash for the telephone companies. Profits (i.e., net income) are a major source for funding investment for most corporations. Considering that profits are about ten cents of every dollar of revenue for the large and mid-sized ILECs, this would seem to be a good source of funding for investment in infrastructure.

If the ILECs' investments have not even reached the level of depreciation accruals, there has been no need to tap any of their profits. This brings us to an interesting question of where is the cash earned by the ILECs going. To pick one mid-sized ILEC holding company as an example, we look at Century Telecom. Even prior to its proposed acquisition of Embarq, CenturyTel is the seventh-largest ILEC in the country and provides over two million access lines, primarily in rural areas and small to

mid-size cities in 24 states.[34] In 2007, CenturyTel had operating revenues of $2.66 billion; more than 12% of its revenues ($336 million) came from Federal and State support programs.[35]

CenturyTel's use of the cash flow from depreciation accruals and profits in 2007 tells a very different story than the rhetoric of the "risk to infrastructure" would have us believe. As shown in the table below, about $1 billion in cash came in from two major sources, net income and depreciation. In other words, CenturyTel's revenue was sufficient to cover all current cash expenses, add $536 million to depreciation reserves, and generate $418 million in income after taxes.

CenturyTel Inc – 2007: Cash inflow

Net Income = $418 million
Depreciation = $536 million
Other Cash = $75 million
Total Cash = $1,030,000,000

The question we are seeking to answer is whether cash flow was a constraint on CenturyTel's ability to invest in new infrastructure. If it was facing a cash flow crunch, then their argument about the vulnerability of their investment to a decline in revenues could raise policy concerns and may influence the debate on intercarrier compensation. The facts tell a different story. CenturyTel was not facing a cash flow crunch in 2007. Rather, it had sufficient cash to engage in two major financial transactions, the acquisition of Madison River, and the buyback of almost one-half billion dollars of their stock. As shown in the table below, CenturyTel used only about one-third of their available cash to invest in the network! The only constraints on their ability to invest in the network, therefore, were the transactional and financial activities designed to serve their stockholders' interests. While there is nothing wrong with a corporation engaging in these activities, it does and should undermine their claim that competition or

[34] CenturyTel Inc., Form 10-K, Filed February 29, 2008.

[35] Id., Federal support programs generated $300 million; state support programs generated $35.6 million.

insufficient intercarrier compensation constitutes the major threat to their continued ability to serve their local telephone customers.

CenturyTel – 2007: Cash Outflow

$1,030,000,000 in available cash
$307,000,000 acquisition of Madison River
$461,000,000 stock buyback
$326,000,000 invested in network

4. DEBUNKING THE MYTH THAT THE CARRIER OF LAST RESORT OBLIGATION REQUIRES A MAKE-WHOLE MECHANISM

Perhaps because of the weakness of the aforementioned arguments, the ILECs are increasingly relying on their carrier of last resort (COLR) "obligation" as the rationale for make-whole payments. For example, ILECs have called for maintaining the level of support payments for existing providers of last resort. Reform of subsidies, in the ILEC view, must be based on a recognition that "the system must recognize that it is funding network infrastructure development and that stability is the supreme interest for rural carriers seeking funding from shareholders and creditors alike. To achieve this stability, however, a number of small tweaks are required."[36] In other words, even though telecommunications markets are undergoing major changes, which are affecting the revenues and costs of all carriers, the ILECs' subsidy – the make-whole payment -- is sacrosanct.

The carrier of last resort defense must be dissected to facilitate reform of intercarrier compensation. We believe that the COLR issue is legitimate, but that its significance is vastly overstated. Importantly, *the potential cost of this obligation is much less than the current sources of explicit and implicit subsidies* now received by the ILECs.

[36] Comments of CenturyTel Inc, WC Docket No. 05-337, April 17, 2008, at iv

The ILECs' ability to fulfill their long-standing COLR obligation at relatively low cost stems from their historic monopoly in the local exchange. Their incumbency came with many benefits, along with obligations that imposed certain costs, and it is wrong to consider only the costs of incumbency and ignore the benefits. Further, it should not be assumed that the obligation to provide local exchange service to all customers outweighs all other policy considerations in reforming intercarrier compensation. Rather, the burden of proof should be shifted to the ILECs, and upon reform of ICC, they should be able to apply for COLR subsidies as needed to cover any demonstrated costs of remaining ready to serve customers now passed by their existing facilities.

Before examining the cost of the COLR obligation, we present a set of principles defining the obligation and circumscribing the costs that legitimately may be eligible for subsidy.

1. COLR should be restricted to the provision of traditional narrow-band services. The proposal in the November Notice to maintain current levels of USF funding, but link them to a requirement that the receiving ILECs deploy broadband service, ignores the fact that current subsidy levels are already well in excess of the cost of the COLR obligation.

2. COLR subsidies should be restricted to serving customer locations already served by the ILECs. Since many ILECs impose surcharges (i.e., special construction tariffs) where they must extend service, they should not be able to double-bill the general ratepayer for deploying lines to new customer locations.

3. COLR subsidies should cover the difference between the forward-looking cost of serving a particular high-cost area and the entire pool of revenues generated by the customers in that area, including any margins earned on unregulated services. Simply put, there is no reason to subsidize an ILEC to serve an area where revenue from voice, data and video service is sufficient to offset the costs of providing service. Further, even if some customers are not "average," the carrier of last resort subsidy should be based on overall

revenues and costs of serving a defined geographic area. The ILEC does not need a subsidy to cover the very low incremental cost of serving any individual customer.

COLR Subsidy Template

We now estimate the potential size of a properly calculated COLR subsidy and compare this estimate to current USF subsidies and the above-cost access revenues now received by the ILEC. The purpose is to demonstrate that the subsidy needed by a number of rural ILECs is well in excess of the total subsidies now available from explicit and implicit sources. In most cases, switched access charges could be reduced to forward-looking economic cost without jeopardizing universal service, since the USF explicit subsidies are sufficient to cover the highest cost serving areas. Furthermore, even where explicit subsidies would have to be increased to provide all the support needed, the amounts needed would be substantially below the above-cost revenues now earned from switched access charges.

The revenue benchmark used to estimate the need for the subsidy should be based on the average revenue per subscriber from regulated and unregulated services. This is necessary to ensure that subsidies are not provided where the carrier already recovers its costs directly from the subscriber. This is also consistent with the proposal in the November Notice, at least with respect to the price cap carriers. As reported above, Verizon reports $67 of revenue per month. AT&T reported revenue in 2007 per residential customer in the upper $50s and projects more than $70 per customer by 2010.[37] There is every reason to believe that the mid-sized ILECs, which are aggressively rolling out their own triple-play packages, can expect revenues to reach the same levels. Indeed, Sprint's recent filing on this subject reports much higher bundle prices for the mid-sized and smaller ILECs than those charged by the large ILECs. For example, TDS charges $98.14 per month in California for the DSL plus unlimited calling bundle.[38] To

[37] Presentation by John Stankey, Group President-Telecom Operations, AT&T Inc., delivered to 2007 Analyst Conference, December 11, 2007, at 12

[38] Sprint, *Written Ex Parte Communications*, CC Docket No. 01-92, WC Docket No. 04-36, CC Docket No. 96-45, October 7, 2008.

err on the conservative side, however, we will estimate the potential COLR subsidy based on $60/month revenue benchmark.

Accurate estimates of the cost of serving rural areas are hard to obtain. Many of the subsidy payments are based on aggregate measures of embedded costs. However, the FCC's High Cost Loop support for price cap ILECs is based on a forward-looking cost model. The results of this model from 2000 are available from the FCC.[39] The results are disaggregated by wire center, which provides a reasonable upper-bound estimate of the level of subsidy needed for a carrier of last resort that is obligated to serve all of the customers in the wire center serving area.

We have estimated the total subsidy needed for four geographic areas: Northern Alabama (CenturyTel); Alabama South (CenturyTel); Oklahoma (Windstream); Missouri (CenturyTel).[40] The subsidy is calculated as the difference between the revenue benchmark of $60 and the forward looking cost on a wire center basis. The size of the annual subsidy for these four geographic areas is shown in the table below.[41]

Estimate of Needed Subsidy Versus Current Revenue

COSA	Southern Alabama (Century)	Northern Alabama (Century)	Oklahoma (Windstream)	Missouri (Century)
Subsidy at $60 Benchmark	$8,034,410	$5,426,229	$ 2,424,326	$ 29,144,816
Revenues:				
Non-Regulated	$ 6,029,000	$ 4,512,000	$ 7,090,000	$ 12,127,000
State Access	$ 15,053,000	$ 11,669,000	$ 7,073,000	$ 73,399,000
Special Access	$ 14,600,000	$ 7,373,000	$ 7,624,000	$ 25,498,000
Federal USF	$ 8,022,434	$ 10,266,557	$ 9,913,686	$ 5,813,532

We compare the size of this potential need for a COLR subsidy to the ILEC's revenue from the highly-profitable "subsidizing" services. For three of the four COSAs, the amount of the subsidy needed that we computed from the model is less than (or

[39] The model was also run in 2004, but the wire center-specific results are not publicly available. We adjust the detailed wire center results from 2000 based on the ratio of the statewide results for 2004 relative to the statewide results for 2000.

[40] Missouri represents the combined results for four study areas. It was necessary to combine these study areas to enable comparison with the results of the High Cost Loop Model.

[41] These geographic areas were chosen because they demonstrate among the highest cost per line served of any of the independent LEC areas reported by the Model.

nearly identical) to the current level of support from the USF. This implies that none of the implicit subsidies are needed to offset the incumbent's COLR responsibilities. In the remaining COSA, which is CenturyTel/Missouri the needed subsidy is larger than the USF credit. However, Century receives substantial revenues from highly-profitable services, such as state access and special access. Even if some of the profits from these services are now subsidizing Century's below-cost local exchanges, the level of available "subsidy" is much larger than the needed subsidy. This implies that access charges can be reduced substantially before it would cut into the margins that are needed to satisfy COLR obligations.

This analysis is not intended to substitute for a comprehensive review of the COLR issue. The ILECs serve some very high-cost areas, including some pockets within wire center serving areas. To the extent the cost estimate for a wire center averages costs across geographic areas with different cost characteristics, it is possible that the size of the total COLR subsidy may be higher than we can tell from the FCC's cost model. Notwithstanding any limitations with the analysis presented here, however, we are confident that the size of any explicit COLR subsidy would be much smaller than the amount by which the ILECs revenues would fall if all intercarrier compensation rates were set at cost. It is absolutely vital that any explicit COLR subsidy be carefully targeted and available to competitors that are willing to stand ready to serve all local exchange customers in a designated geographic area. It may take time to iron out the details and create such a fund, but there is no reason to hold ICC reform hostage. The make-whole model does not apply anymore and there is no evidence that failure to apply this model will sacrifice customer welfare or limit the ability of the ILECs to invest in new infrastructure. It is time for reform -- and a reform without apology.

5. CONCLUSION

Policymakers are confronting a major challenge to rationalize intercarrier compensation and universal service policy. The goal of this white paper is to provide a conceptual template, bolstered by empirical support, to assist Federal and State policymakers in meeting this challenge. We believe that the following principles and factors should guide policy setting on these issues:

- Interconnection is vital to the future of the competitive telecommunications marketplace. In light of the incentive and ability of dominant ILECs to impose artificial costs on their competitors it is vital for regulatory authorities to require dominant firms to provide non-discriminatory, cost-based interconnection.

- The correct economic standard for setting intercarrier compensation is long run incremental cost (LRIC). Local exchange carriers should not be allowed to impose any charges in excess of the additional cost of transporting and terminating the originating carriers' traffic. Ideally, the ICC regime should evolve to bill-and-keep.

- The "make-whole" paradigm is an anachronism, based solely on the traditional rate-of-return regulatory model, which no longer applies *even to most RoR regulated LECs*.

- The ILECs business model has evolved significantly in the last several years from the model of a regulated telephone company. Their customers are subscribing to high-priced bundles of services, which include local and long distance telephone service, Internet service, and video service. The profitability of serving residential customers no longer depends on the revenues and costs of local exchange service alone.

- The ILECs' ability to invest in infrastructure is not threatened by a potential loss in access revenues. Rather, many of the ILECs only need to redirect their

abundant inflow of cash to investing and away from acquisitions and stock buy-backs.

- The carrier of last resort responsibility imposes high costs on some ILECs that need to be subsidized by other ratepayers. However, the amount of subsidies that is needed is a fraction of the total implicit and explicit subsidies currently being generated. Therefore, policymakers should proceed immediately to reduce access charges to cost and increase or redirect explicit subsidies where the need can be proven.