

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

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In the Matter of)	
Special Access Rates for Price Cap Local)	WC Docket No. 05-25
Exchange Carriers)	
AT&T Corp. Petition for Rulemaking to Reform)	
Regulation of Incumbent Local Exchange Carrier)	RM-10593
Rates for Interstate Special Access Services)	
)	

COMMENTS OF Ionary Consulting et al

Introduction

Special Access rates charged by Price Cap Incumbent Local Exchange Carriers are neither just nor reasonable. The high rates of return shown by ARMIS figures are proof that the ILECs are able to extract monopoly profits, due to a regulatory regime that exaggerates the impact of what little competition exists and which does not adequately regulate the service providers that have monopoly power, where they have monopoly power. Substantial reductions in rates are warranted, ideally by reinitializing rates following cost studies.

Ionary Consulting is a solo practice working with competitive telecommunications providers and their suppliers. Its principal, Fred R. Goldstein, has proffered comments in numerous past proceedings before the Commission, and authored the recently published book *The Great Telecom Meltdown*. This Comment represents the views of its author and does not represent the particular views of any of its specific clients. Concurring with Ionary in this Comment are NationsLine Inc. (Roanoke, VA), F. Cary Fitch

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Competition is not vigorous

Competition for Special Access services generally began in the mid-1980s, after NYNEX filed tariffs that produced a rate of return far in excess of the allowable rate. Rather than require the rate to be reduced, the Commission chose instead to allow competition for this business. This led to the birth of the first Competitive Access Provider (CAP), Teleport Communications Group, which provided lower-cost access to Wall Street firms. Since then, the CAP sector has expanded its reach somewhat, and now reaches several thousand large commercial buildings in major cities and large industrial parks around the country. Such expansion largely took place during the telecom boom of the 1990s, was unprofitable, and usually led its providers to either go bankrupt (e.g., eSpire, McLeod USA) or be bought by a larger firm (e.g., TCG's purchase by AT&T), which often went bankrupt (e.g., the MCI Worldcom rollup). There is certainly little CAP construction today. (In this context, a CAP today is typically a CLEC that owns its own fiber optic transmission facilities to subscriber premises.) Instead, there is a glut of CAP fiber in a few places and an unchallenged ILEC monopoly on access to the vast majority of buildings around the country.

Special Access is, in most locations, a *natural monopoly*. Even TCG's original market, the ultra-dense financial district of Manhattan, was attractive because the monopolist *was* extracting monopoly rents in violation of the law; today's narrow CAP marketplace is largely dependent on the steeply discounted price of bankruptcy assets.. The cost of providing competitive facilities is far higher than the incumbent's incremental cost. This is not the case for most other sectors of the telecommunications industry, where true, vigorous competition is possible *provided that* underlying transmission facilities remain available at reasonable rates, unburdened by tying

arrangements. Current FCC pricing policies cap the monopoly rents that the ILEC can extract, and provide CAPs with some protection against predatory pricing. The rate caps, however, do not reflect the rates that are likely to be charged in a truly-competitive market. Economic principles dictate that in a truly-competitive marketplace, prices reach equilibrium near the level that produces a risk-related fair rate of return. Rising ILEC rates of return prove that this is no longer the case.

Special Access is increasingly relevant

From 1996 until 2004, Special Access costs were to some extent limited by competition from other ILEC services, Dedicated Transport and High-Capacity Loop Unbundled Network Elements. Any CLEC could establish collocation and use Dedicated Transport to provision services that were functional substitutes for Special Access. But since the Triennial Review process reduced the availability of these facilities, many existing UNE routes are likely to be converted back to Special Access. Even many circuits used to provide local exchange telephone service to CLEC customers, especially loop-transport combinations (EELs), will become Special Access. Since the preponderance of end user premises do *not* have a substitute unbundled loop facility, Special Access rates will create yet another price squeeze on an already-suffering CLEC sector.

Even in rural areas where unbundled dedicated interoffice transport is nominally available, Special Access is often required because there are multiple ILECs involved. The Bell companies have largely pulled back from rural areas in many states, keeping the major cities and often the access tandems where IXCs meet them. Other areas have interspersed patches of Verizon and SBC. Circuits that cross between ILEC territories cannot be ordered as UNEs. Yet there is usually little or no competition for these routes, nor would it be economical to attempt to build competitive

transmission facilities. Customers, wholesale and retail, are thus forced to pay Special Access rates.

This is even more important for wireless providers who seek to provide broadband services in rural areas. The Commission's UNE rules now prohibit their use for wireless applications, based on an apparent judgment that because Special Access is widely used by today's CMRS carriers; lower UNE rates are not "necessary" for wireless competition. This may be arguably reasonable for today's narrowband wireless services, which generally transmit voice digitized at approximately 8 kbps. (The fact that the largest CMRS carriers are owned by the largest ILECs does, however, imply a possible conflict of interest in how much of the wireless sector protects its own interests.) In rural areas, where customer density is too low to support fiber optic overbuilding, wireless may be the most efficient method for delivering mass-market broadband services, whose average bandwidth requirement is much higher than that of "2G" wireless telephony. Current Special Access rates, especially the absurdly high mileage cost for DS1 and faster services, are a severe impediment to such operators, and may be severely impeding the development of cost-effective broadband service in rural areas.

Existing rates are divorced from cost

Price caps have been in effect for over a decade, during which time the industry has gone through substantial reconfiguration, both at a business and physical level. While fiber optic networks were already the norm for backbone services by the time rate caps were imposed, traffic levels and patterns were very different. In addition, it has been noted (particular effort has been made in this regard by the New Networks Institute) that the ILEC records that were used to create the original rates, above which rate caps have been applied, were far from accurate. Substantial inventory may have been in the ILEC rate base that never existed, or was no longer in service.

For this reason, it is appropriate for Special Access rates to be re-initialized at cost-based levels. Pricing flexibility may then be applied in some instances, but when benchmark rates are based on false or obsolete information, the integrity of the entire process is suspect. We do not oppose current proposals, on an interim basis, to increase the X-factor, but the longer-term answer should include a more detailed cost study and reinitialized rates based upon the results of that study.

An appropriate cost methodology needs to be selected and standardized for this purpose. TELRIC is one option, but it is not the only one. TELRIC perhaps best reflects what a hypothetically-competitive network would cost. Access services are, however, a natural monopoly, so a fair rate structure might be one that provides an appropriate rate of return for each service or narrowly-defined basket of services, with more consideration paid to embedded and actual, rather than hypothetical, costs. However, “gold-plated” network costs should not be encouraged, nor should the rate base be padded in order to raise base rates.

The most egregious examples of excessive Special Access rates apply to interoffice mileage. State-determined TELRIC rates for DS1 services provided by price cap ILECs, for instance, generally show a per-mile component in the range of \$0.11 to \$2.50/month. Yet Special Access mileage is more often in the range of \$14 to \$22/month. This is a minor annoyance in high-density markets such as New York City, where total mileage is usually small. But in rural markets such as Maine, Montana, and much of Texas, the nearest IXC or backbone ISP point of presence is often more than 100 miles away. This results in a dramatic “middle mile” problem that makes broadband Internet service unaffordable in some rural areas. To give a concrete example, the current UNE rate for DS-1 interoffice transport in Maine is \$80.35 plus \$0.39 per mile. A 100-mile circuit – not a very long distance for Maine – thus carries a monthly charge of \$119.35. This has been

shown via TELRIC studies to cover its own costs plus a reasonable share of Verizon's common costs. The interstate Special Access rate is \$51.06 plus \$23.27 per mile, or a total of \$2378.06/month, 1892% higher. This more than tests the limits of "just and reasonable".

Even if a local provider could solve the "last mile" problem, getting to the nearest backbone ISP could thus be prohibitively expensive. A dial-up ISP can typically serve about 200 modems off of a single T1 backbone link; that accommodates 1000-2500 dial-up subscribers. A broadband network would require far more upstream bandwidth. With DS-3 Special Access circuits often carrying a mileage charge greater than \$100/mile/month, true broadband upstream connectivity is frequently unaffordable in rural communities.

Yet the cost of this service to the ILEC is not especially high, in light of TELRIC studies. The fiber optic circuit is a sunk cost. The cost of SONET gear has fallen substantially within the past five years, as traditional add-drop multiplexers (ADMs) have given way to less costly, more functional second and third generation SONET gear in the form of the Mutiservice Provisioning Platform (MSPP). High prices for Special Access have held back demand for high-speed services and thus repressed incumbent-carrier demand for this newer generation of equipment. Similarly, high-speed Packet over SONET services are still rare and costly in the ILEC Special Access world, even though MSPPs that support it are readily available, and a new generation of micro-MSPPs designed for enterprise multiple service delivery is coming to market at costs below \$10,000.

Revised Special Access tariffs should thus not follow the current rate structures, with merely a percentage adjustment. They should be allowed to earn only a just, fair and reasonable rate of return on both the local channel and on the interoffice channel. Mileage rates that are more than twice average TELRIC levels (noting that TELRIC is computed on a state-by-state

basis while interstate Special Access rates are often averaged across a multistate region) should be subject to intense scrutiny.

High-bandwidth circuit rates are especially suspect. TELRIC studies have shown that OC-48 is often *less* costly to provision than lower speeds, presumably because it uses less multiplexing. For example, the 2003 Verizon Massachusetts TELRIC study showed OC-48 at \$1312.46 + \$6.77/mile, vs. \$2643.97 + \$108.53/mile for OC-12. Yet Special Access bandwidth is priced as a precious commodity, again reflecting “value of service” concepts. That same OC-48 is priced in Verizon’s FCC Tariff 11 at \$2950.00/mile (a markup on mileage of 43475%), under 3-year contract that also includes high fixed charges. It actually appears to this observer that the underlying basis for Special Access pricing is not cost at all. Rather, it is the imputed *toll avoidance* opportunity cost to the ILEC, for the number of non-local voice calls that can be carried across a private voice network built from Special Access, using Special Access rates to make up for lost Switched Access revenues. This might have even been a valid business model, albeit bad public policy, for the monopoly LECs in the 1980s, when the preponderance of bandwidth was used for voice. But it is absurd today when data predominates, and even more absurd given the Commission’s obvious intent in CC Docket 01-92 to reform or abolish the Switched Access regime.

This artificially-inflated cost of medium-distance high-bandwidth service dramatically impedes the development of new services, such as video on demand, which require much more bandwidth than telephony. The fiber optic pipe itself is a sunk cost, and it is being used very inefficiently because of the pricing structure.

A g-factor is appropriate

One characteristic of a natural monopoly is economy of scale. Between 1993 and the present time, the scale at which Special Access is provided has grown

enormously. In addition to the growth of local competition, rate caps predated the widespread availability of public Internet services. ISPs were just beginning in 1993, and the national Internet backbone networks did not even move to DS3 services in most locations until 1995. Prior to that time many corporate data networks operated over 56 kilobit/second links; early commercial ISP services often featured 56 kilobit Frame Relay access. Typical “integrated voice and data” transmission facilities of Divestiture’s first decade used “T1” circuits with a preponderance of bandwidth used for voice, typically *tie lines* to interconnect corporate facilities, with one or a handful of DS-0 channels used for data.

But then the Internet happened. The telecom landscape has changed dramatically, going through an unprecedented boom and bust cycle in which billions of dollars were invested and much of that lost. Voice traffic levels, though, have remained relatively steady: People can only talk so much. But data usage has exploded, and with it, the demand for Special Access circuits. Even small businesses often use T1-speed data access, while DS-3 or even faster SONET links are used by larger organizations. While CAPs have picked up some of the load, the ILECs are still the largest suppliers of these links, typically via Special Access. The unit cost of provisioning these circuits has gone down, due to economies of scale, while prices have remained relatively steady, which accounts for the rising rates of return. Yet the price cap regime is essentially oblivious to this. It pretends that the x-factor can account for ongoing productivity changes, while nothing else is really different. As far as price caps go, the boom and the meltdown never happened.

The Commission’s own statistics illustrate the growth of Special Access. Statistics of Communications Common Carriers (SOCC) for 2003 shows the volume of Special Access ILEC DS0 channels as 117,717,780. (Fewer than one million analog Special Access lines remain in service.) In 1995, the total

number of digital Special Access channels was only 15,465,917, with 2,137,734 analog lines in service. This is a growth of 661% over eight years for digital lines, or a 129% compounded annual growth rate. Special Access revenues have grown over the same period of time from \$2,982 million to \$14,402 million. This represents a smaller percentage increase (383% over eight years) but that largely reflects a shift towards higher bit rate circuits, with a lower average per-DS-0 price. ILEC economies of scale are also no doubt impacted by services sold under different rates, such as the Dedicated Transport Unbundled Network Element, which bear many technical similarities to Special Access and use many of the same facilities.

The proposed g-factor, by which rate caps are reduced in response to the growth of the market, is an appropriate response. Incremental demand is not entirely accompanied by incremental cost. Most of the cost of the transmission network is fixed; per-bandwidth rates are merely a tool to divide the cost among its users. Shy of a return to rate-of-return regulation, a g-factor is probably the simplest way to allow some economies of scale to trickle down to the ratepayers, including both end users and wholesale customers such as ISPs, IXCs, CLECs, and CMRSs. The g-factor should be applied on a going-forward basis. It may also be useful on a retrospective basis, to re-balance rates back to the beginning of rate caps, if the Commission does not choose instead to require a full cost study and reinitialization of rates.

These excessive rates have no doubt served to repress demand and cause networks to be designed around them. The widespread use of carrier hotels and off-site data services at locations that do not depend on ILEC connectivity is a free-market reaction to the decidedly non-free market pricing of Special Access. As with other economic distortions caused by fatuous monopoly pricing, some customers are more able than others to make

use of off-site services. The mere fact that a work-around exists does not change the fact that the underlying problem is still serious.

Summary

Competition in Special Access is quite limited, and has not sufficed to control prices except in narrow areas. The Commission should bring Special Access rates of incumbent carriers into line with costs. This should involve both a change in the x-factor, the introduction of a g-factor, and a reinitialization of all incumbent carriers' rates to cost-based levels.

Respectfully submitted,

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