Summary of Testimony of Larissa Herda President, CEO, Chairman of the Board, Time Warner Telecom, Inc. Before the United States House of Representatives Committee on Energy and Commerce Subcommittee on Telecommunications and the Internet
October 2, 2007

In their forbearance petitions currently pending before the FCC, the incumbent local exchange carriers ("ILECs") such as AT&T and Qwest have asked the FCC to classify Ethernet and similar broadband business services as subject to effective competition. If granted, these petitions would essentially prevent the FCC from regulating the prices at which the ILECs offer Ethernet. This would be extremely harmful to American businesses and to the U.S. economy.

Time Warner Telecom provides sophisticated broadband and voice services to businesses in 75 markets across the United States. Time Warner Telecom is especially focused on providing Ethernet to business customers. Ethernet is a "next generation" broadband service that is far more efficient than legacy business broadband services such as Frame Relay and ATM. The difference between Ethernet and these older technologies is like the difference between dial-up and DSL/cable modem services for residential customers. Unfortunately, Ethernet is not widely available to business customers in many parts of the United States. In fact, as British Telecom recently explained, "Ethernet is more widely deployed in Europe than in the U.S., even though enterprise customers want it wherever they do business." The U.S. is falling behind the rest of the world in the provision of business broadband services for four reasons.

- The ILECs have relatively little incentive to promote Ethernet aggressively because Ethernet cannibalizes their huge legacy Frame Relay and ATM businesses.

- Cable companies (with the exception of Cox) generally do not offer Ethernet to any significant degree.

- Competitors like TWTC aggressively promote Ethernet, but TWTC, which has built more loop connections to commercial buildings than any other non-ILEC, cannot reach most businesses with its network (TWTC is unable to extend its network to reach fully 75 percent of its customer locations); in locations where TWTC cannot deploy its own facilities, it usually has no choice other than the ILECs' facilities; unfortunately, the ILECs' Ethernet wholesale loop facilities are priced so high that TWTC cannot rely on them to provide retail Ethernet service.

- Nor is it efficient for TWTC to rely on older so-called DS1 and DS3 ILEC facilities on a widespread basis as inputs for TWTC's retail Ethernet offerings; reliance on such older facilities is extremely costly, technologically inefficient and it results in degraded Ethernet service quality.

The only feasible means of increasing the extent to which businesses receive Ethernet services is for the FCC to prescribe lower ILEC wholesale Ethernet prices so that competitors like TWTC can offer the service to locations not reached by their networks. This can only be accomplished if the FCC denies the pending ILEC petitions for forbearance and mandates lower ILEC Ethernet wholesale rates in the future.

Before the United States House of Representatives

Committee on Energy and Commerce

Subcommittee on Telecommunications and the Internet

Testimony of

Larissa Herda

Chairman, CEO and President of

Time Warner Telecom

October 2, 2007

Good morning, Chairman Markey and members of the Subcommittee: My name is Larissa Herda and I am the Chairman, CEO and President of Time Warner Telecom. It is an honor to appear before you today to discuss the future of business broadband in this country. This is an issue that not only impacts my business but the bottom line of every American business that wants to take advantage of the additional bandwidth, cost savings and efficiencies that broadband technology provides.

Company Overview

Time Warner Telecom, headquartered in Littleton, Colorado, is a leading provider of managed networking solutions to a wide array of businesses and organizations in 75 U.S. markets, spanning 30 states and the District of Columbia. As one of the country's premier competitive service providers, Time Warner Telecom integrates data, dedicated Internet access,

and local and long-distance voice services for long-distance carriers, wireless communications companies, incumbent local exchange carriers ("ILECs"), and enterprise organizations in healthcare, finance, higher education, manufacturing, and hospitality industries, as well as for military, state and local government. Time Warner Telecom delivers intelligent solutions to solve the most critical communications needs of businesses. These solutions maximize communications system efficiencies, increase employee productivity, and minimize bottom-line costs.

The Future Of Business Broadband

In several petitions for forbearance currently pending before the FCC, the incumbent local exchange carriers ("ILECs") such as AT&T and Qwest have asked the FCC to deregulate their Ethernet and other business broadband service offerings. Unlike the residential market, the ILECs still control the only last mile transmission facility, or local loop, to the vast majority of office buildings nationwide. The ILECs have exploited this market power in a manner that harms businesses. Accordingly, the should therefore deny the pending forbearance petitions and revise the current regulatory regime to recognize the fact that the ILECs still control the last mile connection to the business customer, regardless of the technology used to provide the service.[1]

Time Warner Telecom has invested billions of dollars to connect approximately 8000 buildings with our own fiber network – more than any other non-incumbent telecommunications carrier in the country. But there are many locations where it is simply uneconomical to build our

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[1] *See Comments of Time Warner Telecom, Special Access Rates for Price Cap Local Exchange Carriers*, FCC WC Docket No. 05-25 (Aug. 8, 2007), attached hereto as Appendix A, in which Time Warner Telecom explains why the FCC must prescribe lower ILEC prices for both Ethernet and other services such as DS1 and DS3 services demanded by businesses.

own network facilities. In such locations, we have no choice but to rely on facilities we lease from the ILECs to meet customer demand. In fact, we have no choice but to serve approximately 75 percent of our customer locations by leasing incumbent facilities.

At Time Warner Telecom, we are focused on serving the data and communications needs of enterprise customers. We are particularly focused on providing those customers a service called Ethernet. I want to explain a bit about Ethernet because it is such an important tool for business and because the ILEC petitions for forbearance currently pending before the FCC threaten the potential economic benefits of Ethernet.

Ethernet is a "plug and play" transmission technology that allows customers to converge all of their data and communications needs with a single transmission facility. Older technologies like Asynchronous Transfer Mode ("ATM") and Frame Relay require a piece of equipment to "translate" between the various different kinds of equipment used by end-users and carriers. Ethernet technology, the same technology that has been used in the networks inside of buildings for years, eliminates the need for these "translations" making it simple and cheap for customers to add new services and capacity to their communications services. The qualitative difference for businesses between Ethernet and older and more complicated technologies, such as ATM and Frame Relay, is like the difference between dial-up broadband and DSL and cable modem service. Importantly, the inherent efficiencies of Ethernet permit carriers to offer Ethernet at a lower price per bit than legacy technologies like ATM and Frame Relay. As a result, Ethernet provides better features at a lower cost.

Ethernet allows businesses to function more efficiently in countless ways. For example, Ethernet enables medical institutions to send urgent images, and information between locations

in seconds. It also enables banks to improve response times and process more information in significantly less time. It supports all customers with data and disaster recovery capabilities needed to protecting the electronic files critical to both business and public institutions. I have attached as Appendix B hereto some customer case studies that we created with our customers that further highlight the value customers obtain from a competitive alternative utilizing Ethernet.

Despite the great benefits of Ethernet, most businesses in the United States are unable to purchase this service today. The absence of widespread availability of Ethernet increases the costs and reduces the efficiency of businesses across this country, and places the United States at a disadvantage *vís-a-vís* other countries. For example, As British Telecom has recently explained in a filing at the FCC, "Ethernet is more widely deployed in Europe than in the U.S., even though enterprise customers want it wherever they do business." Moreover, British Telecom explained that, "[w]holesale Ethernet access in the UK is also cheaper than it is in the U.S. For example, basic 10 Mbps point to point wholesale Ethernet in the UK is available at a quarter to one half of the prices charged by AT&T and Verizon."[2]

The question, then, is why aren't more businesses receiving the benefits of Ethernet in this country? The answer is quite simple. To begin with, the ILECs have relatively little incentive to promote Ethernet aggressively because Ethernet cannibalizes their huge legacy -- the old generation of Frame Relay and ATM services for which ILECs receive a higher revenue per bit than they would receive for Ethernet services. This is not the first time that the ILECs have

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[2] *See Comments of British Telecom, Special Access Rates for Price Cap Local Exchange Carriers*, FCC WC Docket No. 05-25 at 20-21 (Aug. 8, 2007).

warehoused better, cheaper technology because they wanted to milk the profits from older, higher priced, legacy technologies. For example, DSL technology had been around for years before its eventual widespread deployment in the late 1990s, but the ILECs did not want to make the substantial network investment required to offer a high bandwidth service for $50 per month when they could continue to offer high-priced legacy plain old telephone service lines. It took the entry of competitive LECs like Covad into the DSL market and the cable companies' deployment of cable modem services for the ILECs to finally begin selling DSL service on their own. The ILECs' foot dragging prevented consumers from receiving the benefits of low-priced broadband for years.

Moreover, not only is Ethernet unavailable from the incumbents in most office buildings, but the cable companies (with the exception of Cox) generally do not offer Ethernet to any significant degree either. This makes business broadband fundamentally different from consumer broadband, in which cable companies are aggressive competitors.

As a result, it is up to competitors like Time Warner Telecom to drive the rollout of Ethernet. In fact, Time Warner Telecom is currently the number three provider of Ethernet in the country. But we are the third biggest fish in a small pond and we do not have the power to make it much bigger because, as explained above, we cannot economically reach most business locations with our own network.

Even where the ILECs offer Ethernet on a wholesale basis, they charge extremely high prices for these services, as illustrated in the pricing charts attached hereto as Appendix C. In most cases, it is not economical to purchase wholesale Ethernet and combine it with our on-net

Ethernet product in order to sell customers the complete service offering they need to manage their communications needs most effectively.

I have been told countless times by a diverse group of customers that they could not purchase Ethernet until it was offered by Time Warner Telecom. But I am effectively restricted to offering service in only the limited number of locations I can serve on my network. Meanwhile the ILECs need only respond with their own competitive offerings of Ethernet in locations served by a competitor's network. The ILECs need not, and often do not, offer Ethernet in the hundreds of thousands of locations where they control the only broadband connection to the building. It is American businesses and the American economy that lose out because of the current situation.

This reality forces the conclusion that the only practical means of expanding the availability of Ethernet to more businesses is for the FCC to mandate lower ILEC Ethernet wholesale prices to ensure that the ILECs charge prices that are more in line with those charged by competitive wholesale providers like Time Warner Telecom.

That will not happen if the FCC grants the forbearance petitions that are now pending before the agency. In those petitions, AT&T, Qwest and other ILECs have asked that the FCC reclassify their Ethernet service offerings as subject to effective competition. The effect of such a reclassification is that it would be virtually impossible to regulate the ILECs' Ethernet prices. This is obviously the wrong direction for businesses and the American economy.

In fact, there is no basis for the distinction that the ILECs seek to make between Ethernet and older special access services, such as DS1 and DS3 services, for which they do not seek reclassification in their forbearance petitions. Ethernet is simply a form of special access loop,

just like the DS1 and DS3 (*i.e*. TDM) facilities that are justifiably the focus of much attention at today's hearing.[3] In fact, the FCC has consistently regulated Ethernet as special access and the ILECs themselves offer Ethernet as special access in their publicly filed tariffs. The only difference between a fiber loop facility that carries an Ethernet signal and a fiber loop facility that carries a TDM signal is the electronics placed on each end. Most of the expense of loop construction goes into digging and laying the fiber. Therefore, just as Time Warner Telecom often cannot economically build fiber to provide a TDM service, it cannot in many cases build fiber to provide Ethernet service. As a consequence, all of these facilities -- Ethernet, DS1 and DS3 facilities -- must be available as a viable wholesale input.

Finally, many ILECs argue that there is no need to regulate Ethernet because competitors can profitably use DS1 and DS3 loops to provide Ethernet. This is simply not the case. The numbers speak for themselves. While Time Warner Telecom can serve 75 percent of its customer locations using ILEC special access, ***only a small fraction*** of its Ethernet customers are served using ILEC TDM special access facilities.

While *theoretically* Time Warner Telecom could use TDM special access services to serve any location (*i.e.* the technology is available), high prices and other inefficiencies mean that *in practice* Time Warner Telecom *cannot* rely on these inputs in the vast majority of cases to provide Ethernet. Similarly, I could theoretically get a small two-door compact car to haul a trailer, but I could only do so if I heavily modified the car, switched out the engine and transmission. It is far more efficient and sensible to buy a truck in the first place.

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[3] As explained in Time Warner Telecom's comments in the FCC's special access rulemaking proceeding, attached hereto as Appendix A, Time Warner Telecom strongly supports the reduction of ILEC DS1 and DS3 special access prices. *Comments of Time Warner Telecom*.

In sum, Time Warner Telecom cannot profitably use TDM special access services to provide Ethernet in most situations for four main reasons:

First, when Time Warner Telecom purchases TDM transmission facilities to provide Ethernet, it must pay for two distinct sets of electronics: TDM electronics (as part of the TDM circuit) and Ethernet electronics. In addition, Time Warner Telecom must send an installation engineer to install the Customer Premises Equipment needed to support Ethernet over TDM. In contrast, where Time Warner Telecom purchases Ethernet transmission facilities, it only pays for one set of electronics (Ethernet electronics) and it need not send an installation engineer to the customer premises. In addition, reliance on TDM transmission facilities imposes extra, and otherwise unnecessary, integration costs on Time Warner Telecom.

Second, TDM transmission facilities *are not available* in the transmission increments needed to provide Ethernet. For example, if Time Warner Telecom wishes to provide a 50 Mbps Ethernet connection via TDM, it must buy at least two DS3s, each of which delivers 45 Mbps of capacity. This is because TDM circuits (because of the inherent limitations in the technology) cannot be provisioned in 50 Mbps increments. As a result of purchasing two DS3s, therefore, Time Warner Telecom receives 90 Mbps of capacity, 40 Mbps of which it must pay for but cannot use. In contrast, if Time Warner Telecom relies on Ethernet transmission facilities purchased at wholesale, Ethernet electronics enable the wholesaler to offer the Ethernet facilities at precisely the capacity levels needed by the retail customers.

Third, reliance on TDM transmission facilities creates serious service quality problems. The use of an extra set of electronics introduces extra potential points of technical failure. Moreover, where a circuit experiences technical problems, Time Warner Telecom must incur the

extra delay and expense of determining whether the source of the problem is the extra set of TDM electronics before even addressing a problem that may have been caused by its Ethernet electronics. In contrast, reliance on ILEC Ethernet local transmission facilities reduces both the number of potential points of failure and the time and expense of resolving such problems. For services such as Ethernet that businesses rely on to deliver critical functionalities, this service quality differential is extremely important.

Fourth, in the longer term, as Ethernet services evolve -- and they are doing so very quickly -- it will become increasingly difficult to ensure compatibility between TDM transmission inputs and Ethernet finished services. It is inevitable that the service characteristics of Ethernet offered over TDM will become increasingly less robust than the Ethernet service provided using Ethernet transmission facilities.

In light of this discussion, it should be clear that the future of business broadband in this country will be severely harmed if the FCC were to grant the ILEC petitions for forbearance from regulation of Ethernet and other business broadband services. Already, as a result of its failure to act by the statutory deadline, the FCC allowed Verizon's Ethernet service to become completely deregulated. This is the wrong direction for competition and the economy. I therefore respectfully urge the Committee to provide any assistance it can in its oversight role to ensure that the Commission not only rejects the pending forbearance petitions, but acts during the pending special access proceedings in the best interest of businesses across America by establishing reasonable constraints on ILEC prices for Ethernet, DS-1, DS-3 and other business broadband services.

Thank you for your time and attention today. I would be happy to answer any questions you may have.

APPENDIX A

REDACTED -- FOR PUBLIC INSPECTION

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August 8, 2007

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
Room TW-325
445 12th Street, S.W.
Washington D.C. 20554

Re: In the Matter of Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25

Dear Ms. Dortch:

On behalf of Time Warner Telecom Inc., and One Communications Corp. please find enclosed two copies of a Redacted Confidential version of comments filed today in the above referenced docket. Pursuant to the protective order in this proceeding, two copies of a confidential version of these comments have been filed with Margaret Dailey or Pamela Arluk and one copy of a confidential version of these comments has been filed with the Secretary. A Redacted Confidential version has also been filed electronically on ECFS.

Please let us know if you have any questions with respect to this submission.

Respectfully submitted,

Thomas Jones
Jonathan Lechter

WILLKIE FARR & GALLAGHER LLP
ATTORNEYS FOR TIME WARNER TELECOM INC.
AND ONE COMMUNICATIONS

cc: Margaret Dailey, Pamela Arluk

REDACTED-FOR PUBLIC INSPECTION

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

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

COMMENTS OF TIME WARNER TELECOM AND ONE COMMUNICATIONS

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ATTORNEYS FOR TIME WARNER TELECOM AND ONE COMMUNICATIONS

August 8, 2007

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REDACTED-FOR PUBLIC INSPECTION

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

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	)	
AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services	)	RM-10593

COMMENTS OF TIME WARNER TELECOM AND ONE COMMUNICATIONS

Time Warner Telecom Inc.("TWTC") and One Communications ("One Communications"), by their attorneys, hereby file comments in response to the public notice[1] in the above-captioned proceeding.

I. INTRODUCTION AND SUMMARY

It has now been almost five years since AT&T filed its petition for rulemaking to reform special access regulation, more than two and a half years since the Commission released its Notice of Proposed Rulemaking seeking comments on how it should regulate special access in the future, and more than two years since the end of the CALLS plan regulatory regime for special access. Time continues to pass, but three facts remain constant: (1) the ILECs continue to control the only viable local transmission facility serving at least 90 percent of the commercial buildings in the country; (2) the FCC's regulatory framework for special access gives the ILECs virtually a free hand to exploit their control over bottleneck facilities; and (3) the ILECs are doing so by charging

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[1] *See Parties Asked to Refresh Record in the Special Access Notice of Proposed Rulemaking,* Public Notice, FCC 07-123 (rel. Jul. 7, 2007) ("*Public Notice*").

outrageously high prices and by engaging in exclusionary pricing practices to prevent wholesale competition from developing. No amount of "refreshing the record" in this proceeding will change these facts. They require that the Commission act now to mandate lower ILEC special access prices and to prohibit ILECs from engaging in exclusionary pricing.

There is more and more evidence that the ILECs have a monopoly over transmission facilities serving the "vast majority" (as the Justice Department put it) of commercial buildings in the United States. This is the conclusion reached by the GAO in its study of the special access market, by the Justice Department in its review of the Bell/IXC mergers and even by the FCC in the *TRRO* proceeding. This conclusion is consistent with all of the data provided in this and other proceedings by ILECs and competitors alike. It also comports with the market realities that TWTC and One Communications face. For example, TWTC deploys its own loops more aggressively and extensively than any other competitor, but it relies on ILECs to connect to the vast majority of its customer locations. One Communications, which generally serves smaller businesses than TWTC, has no choice but to rely on ILECs for virtually every one of its end user connections. There is also no basis for concluding that intermodal competitors -- cable, fixed wireless or satellite -- provide any material downstream competition for ILEC special access services.

Moreover, there is no disputing the fact that the current regulatory framework for special access is fundamentally flawed. The pricing flexibility triggers eliminate price cap regulation throughout an MSA based on indications of entry in a small subpart of the MSA, eliminate price cap regulation for DS1 and DS3 service without proof that

competitors provide those services, and eliminate price cap regulation of ILEC special access loops throughout an MSA without proof that a single competitor has deployed a single loop facility anywhere in the MSA. The FCC itself has concluded that the pricing flexibility triggers "provide[] little indication that competitors have self-deployed alternative facilities" in the areas in which the ILECs are obtain pricing flexibility. But even ILEC special access services that remain subject to price caps are not effectively regulated since the FCC has freed the ILECs' special access basket price cap index from any X-Factor reductions since mid-2004 and has allowed ILECs to offer volume and term discounts without any effective constraints on exclusionary pricing.

Unsurprisingly, the ILECs continue to exploit the absence of effective special access regulation to harm consumer welfare and competition in obvious and pernicious ways. The ILECs continue to charge extraordinarily high prices for special access services of all kinds. As explained more fully in these comments, even the most discounted prices ILECs charge for special access in MSAs freed from price cap regulation ("Phase II" areas) are consistently and significantly higher than ILEC special access prices charged in areas subject price caps. Moreover, even the most discounted ILEC special access prices in areas subject to price caps are consistently and significantly higher than prices charged by competitors in the few areas in which competitors offer service. ILEC prices for DS1 and DS3 mileage and for Ethernet cross-connects are the most egregious, and represent blatant examples monopoly pricing.

In addition, the ILECs continue to engage in exclusionary pricing to prevent wholesale competitors like TWTC from gaining market share and from expanding their network footprint to serve other carriers. The ILECs do this by conditioning the

availability of discounts off of their absurdly high month-to-month special access rates on customers' agreement to provisions that have the effect of locking up a customer's demand with the ILEC. As part of these agreements, ILECs require that customers agree to onerous penalties for failure to meet their commitments under these lock-up agreement. Customers wishing to purchase service from a competitive wholesaler risk failing to meet their volume commitments under the lock up agreements. No competitor can offer a steep enough discount in its limited network footprint to make this risk worth taking for a customer.

All of this evidence leads to the conclusion that the Commission must act now to limit the ILECs' opportunities to use their control over local transmission facilities serving business and carrier customers to harm consumer welfare and competition. *First*, it must mandate that ILECs lower their special access prices. There are many ways in which this could be accomplished, but the most practical approach is to (1) eliminate Phase II pricing flexibility; (2) require inclusion of all DS1, DS3, OCn and Ethernet services in the special access price cap basket; (3) re-initialize the level of the price cap index for the basket at the level that would have applied had the FCC continued to apply the 6.5 percent X-Factor from July 1, 2001 to the present and continue to apply that X-Factor in future years; (4) mandate reduction of ILEC Ethernet cross-connect prices by 50 percent; and (5) allow ILECs the right to substitute the price yielded by these reforms with prices set based on forward-looking cost studies.

Second, the Commission must stop the ILECs from engaging in exclusionary pricing. It should do so by prohibiting ILECs from conditioning the availability of any discount off of standard tariffed pricing for any kind of special access (TDM, OCn or

packetized) on a commitment that is not reasonably related to the efficiencies yielded by the volume or term commitment that is at issue. In addition, the Commission should declare that certain types of conditions that have the effect of locking up the market and preventing wholesale competition from developing are *per se* unlawful under this regulation, and should provide a list of such unlawful conditions.

Third, in order to allow purchasers and competitive wholesale providers of special access to take advantage of the new terms mandated by these reforms, the Commission should mandate that the ILECs grant all customers subject to existing special access contracts or volume/term commitments a "fresh look" right (one such election right per arrangement) to terminate any existing special access purchasing arrangement without the application of an early termination penalty within one year of the effective date of this rule. Absent this requirement, special access purchasers who are tied up in multi-year term commitments could well be forced to continue to pay unreasonable prices or abide by unreasonable terms and conditions for years after the adoption of the reforms described herein.

II. ILECS RETAIN OVERWHELMING MARKET POWER OVER THE LOCAL TRANSMISSION FACILITIES NEEDED TO PROVIDE SPECIAL ACCESS.

Special access services are provided via local transmission facilities. A firm that controls the only local transmission facilities over which special access services can be provided has the ability to dominate the special access market by unilaterally increasing prices and by raising its rivals' costs. The extent to which the ILECs control bottleneck local transmission facilities is therefore critical to the question of whether and to what extent the Commission should regulate ILEC special access services. As explained herein, all of the available evidence supports the conclusion that, for the overwhelming

majority of commercial buildings in the country, the ILECs control the only viable local transmission facility.

A. All Relevant Government Agencies Have Found That ILECs Retain Market Power Over Local Transmission Facilities

Virtually every federal government agency with relevant expertise has now examined the competitiveness of the local transmission (loop and transport) market. Every one of these agencies has reached the same conclusion: ILECs retain overwhelming market power over the upstream loop and transport inputs needed to serve small, medium and large business customers. Importantly, every one of these studies accounted for the presence of cable, wireless and other intermodal competitors. By any definition, the ILECs therefore continue to dominate the local transmission market.

For example, the Government Accountability Office ("GAO") determined that, based on data from GeoResults and Telcordia, competitors have deployed transmission facilities to less than 6 percent of the buildings demanding at least DS-1 level service in the 16 urban markets studied.[2] Of course, outside of these urban markets, competitive deployment is likely even lower. The GAO found that nearly all of the loops that competitors have deployed are well above the DS-1 level of capacity. Competitive entry at low circuit capacities is unlikely according to the GAO. In light of long-standing entry barriers, the GAO concluded that "wireline facilities-based competition itself *may not be*

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[2] *See GAO, FCC Needs to Improve Its Ability to Monitor and Determine the Extent of Competition in Dedicated Access Services*, GAO-07-80, at 22 (Washington, D.C., Nov. 2006) ("*GAO Report*"). The GAO acknowledged that GeoResults data could overcount or undercount the number of buildings served by CLECs and one "price-cap incumbent" suggested that GAO may undercounting by as much as 30 percent. Even if this were the case, it concluded that "competitive alternatives exist in a relatively small subset of buildings." *Id.*

a realistic goal for some segments of the market for dedicated access...Where demand for dedicated access is less than 3 or 4 DS-1's, it would appear unlikely that any competitor would extend its network for that business." *GAO Report* at 42 (emphasis added). The report showed that most of the loops deployed by competitors provide 2 DS-3s or higher of capacity, but the ILECs remain dominant even in that submarket. *See id.* at 20. The GAO emphasized that its study *accounted for both intramodal and intermodal competition* (including cable companies and wireless). *See id.* at 47.

The Justice Department also conducted an independent review of the market for high capacity local transmission facilities needed to serve businesses in the Verizon and SBC territories in connection with its review of Verizon/MCI and SBC/AT&T mergers. The Department concluded that Verizon and SBC controlled the only last-mile access to the "vast majority of commercial buildings in its territory,"[3] and that high fixed and sunk costs make deployment of competitors' facilities "difficult, time consuming and expensive..." *DOJ Complaint* ¶ 27. Given its careful methodology in conducting market review of this sort, it is virtually certain that the Department considered all types of competition, including intermodal, cable and wireless.[4]

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[3] *United States v. Verizon Communications, Inc. and MCI Inc.*, Case No. 1:05CV02103, Complaint ¶ 15 (D.D.C. filed Oct. 27, 2005) ("*DOJ Complaint*"); GAO Report at 25 ("However, DOJ found [in its review of the Bell/IXC mergers] that, for the vast majority of buildings in the MSAs it reviewed, no competitive providers of dedicated access facilities existed, which is consistent with the data in table 2.").

[4] In the past, ILECs have made much of language in the FCC's Bell/IXC orders which they allege represents the FCC's conclusion that the special access market is competitive. *See e.g.,* Petition for Forbearance of the Verizon Telephone Companies For Forbearance Pursuant to 47 U.S.C. § 160 in the New York Metropolitan Statistical Area, WC Dkt. No. 06-172 at 17 (filed Sept. 6, 2006) ("*Verizon New York MSA Petition*"). But the FCC's job in scrutinizing these mergers was to determine the extent to which the *merger* would reduce competition in the wholesale and retail special access markets. The FCC never

The FCC reached similar conclusions in the *TRO*. There, the Commission found that competitors serve only 3-5 percent of the commercial buildings nationwide.[5] Moreover, the FCC found that it is not "economic" or "possible" for a reasonably efficient competitor to construct DS-0 loops anywhere in the country or DS-1 or even single DS-3 loops in the vast majority of wire centers in the country.[6]

As the GAO and DOJ studies demonstrate, the conclusions reached by the FCC in the TRO are valid today. If anything, the number of loop facilities deployed by competitive carriers may have actually decreased substantially in the last few years as a result of the Bell/IXC mergers. Legacy AT&T and MCI had together deployed over 10,000 loop facilities.[7] Thousands of these facilities were "in-region" to the acquiring BOC but were not subject to divestiture. Verizon and AT&T therefore absorbed these facilities into their ILEC operations post-merger.[8] It comes as no surprise, therefore, that

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reached any conclusions regarding the level of competition in the market for local transmission facilities needed to provide special access or the level of competition in the wholesale special access market. Those questions were not before Commission in the Bell/IXC merger proceedings.

[5] *See Review of the Section 251 Unbundling Obligations of Local Exchange Carriers, et al.*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, ¶ 298 n.856 (2003), *subsequent history omitted* ("*TRO*") (stating that both "competitive LECs and incumbent LECs report that approximately 30,000, *i.e.*, between 3% to 5%, of the nation's commercial office buildings are served by competitor-owned fiber loops").

[6] *See Unbundled Access to Network Elements, et al.*, Order on Remand, 20 FCC Rcd 2533, ¶¶ 149, 166 (2005) ("*TRRO*").

[7] Reply Comments of WilTel Communications, LLC, WC Dkt. No. 05-25, RM-10593, at 3 (July 29, 2005) ("*WilTel Reply*").

[8] The DOJ ordered divestitures of only several hundred of these facilities. *See Complaint* ¶ 3.

the GAO has concluded that the level of competition may have declined in many MSAs recently.[9]

B. Data Provided By Carriers In FCC Proceedings Supports The Conclusion That The ILECs Retain Overwhelming Market Power Over Local Transmission Facilities

The data submitted in FCC proceedings by both competitors and ILECs support the conclusions reached by the GAO, DOJ and FCC. For example, using its own database, Wiltel has estimated that competitors have "deployed special access facilities to approximately 25,000 commercial buildings nationwide." *Wiltel Reply* at 3. Sprint came to a similar conclusion, asserting that, of the 3 million buildings demanding special access service, only 22,000 were served by CLECs.[10]

The RBOCs' own data confirm these conclusions. Two years ago, Verizon asserted that competitors had deployed loops serving "31,467+" buildings.[11] Verizon indicated that, back in 1996, there were only 24,000 buildings "served directly by CLEC fiber."[12] In other words, in nearly 10 years, competitors added connections to less than

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[9] *See GAO Report* at 42 ("Even more troublesome is the fact that some of our analysis, which is based on FCC's competition metrics, suggests that competitive alternatives for dedicated access have declined in some MSAs in the past few years.").

[10] *See In re Broadband Connectivity Competition Policy Workshop - Comment, Project No. V070000*, Letter from Robert S. Foosaner, SVP -Government Affairs, Sprint/Nextel, to FTC, Office of the Secretary, at n.4 (Feb. 28, 2007), attached to *Ex Parte* Letter of Anna M. Gomez, VP - Government Affairs, Sprint/Nextel, to Marlene H. Dortch, Secretary, FCC (filed Mar. 21, 2007).

[11] Verizon Comments, WC Dkt. No. 05-25, Attach. D, Declaration of Quintin Lew, at App. B (June 13, 2005).

[12] Verizon Comments, WC Dkt. No. 05-25, Attach. C, Declaration of William E. Taylor, at Table 10 (June 13, 2005).

8,000 buildings. This limited growth only underscores the substantial barriers to deployment of local transmission facilities.

Similarly, in the AT&T/BellSouth merger proceeding, the Applicants argued that there were 219,000 commercial buildings demanding enterprise class services in BellSouth's territory.[13] Yet, in the *Triennial Review Remand* proceeding less than three years ago, BellSouth stated that CLEC fiber loops served only approximately 2,200 buildings in all of BellSouth's service area or 1 percent of the market.[14]

Not surprisingly, competitive carriers have explained in detail that they rely on ILEC facilities in he vast majority of circumstances. Sprint/Nextel and T-Mobile rely on DS-1 facilities to connect their wireless towers to mobile switching stations. They must rely on ILEC facilities 95[15] and 96 percent of the time respectively.[16] Even legacy AT&T and MCI, each of which had some of the highest number of on-net buildings of any

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[13] *See SBC Communications, Inc. and AT&T Corp. Application for Transfer of Control*, Reply Declaration of Dennis W. Carlton & Hal S. Sider, WC Dkt. No. 05-65, ¶ 22 (filed May 10, 2005).

[14] *See* BellSouth Presentation, "Lessons Learned in State TRO Proceedings," attached to *Ex Parte* Letter of Glenn T. Reynolds, Vice President, Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Dkt. No. 01-338, at 4 (Aug. 18, 2004) ("In BellSouth's region: More than 2,200 buildings are served by non-ILEC fiber."). Professor Lee Selwyn asserted that the data submitted by BellSouth in this proceeding shows that "BellSouth control[s] 97.7% of special access tail circuits in its region. " WilTel Reply at 7 (*citing* to the Reply Declaration of Lee Selwyn, appended to WilTel Reply as Ex. 7 (*Selwyn Declaration*)).

[15] *See* Comments of Sprint, WC Dkt. No. 05-25, RM-10593, at 7 (June 13, 2005).

[16] *See* Comments of T-Mobile, Declaration of Chris Sykes, WC Dkt. No. 05-25, RM-10593, ¶ 5 (June 13, 2005).

competitor prior to their mergers with SBC and Verizon, relied on the ILEC 90 and 95 percent of the time to serve their end user customers.[17]

C. TWTC And One Communications Remain Heavily Reliant On ILEC Loop Facilities And Can Only Construct Loops In A Limited Number Of Locations

TWTC's and One Communications' experience further support the conclusion that competitors have only been able to deploy their own local transmission facilities to a small fraction of the commercial buildings in the country. For example, legacy TWTC (excluding Xspedius' facilities)[18] serves 20,221 customer locations and has been able to deploy loops to only 7,884 locations. Therefore, legacy TWTC serves approximately one quarter of its buildings on-net. This is so even though TWTC has likely deployed its own loop facilities to more commercial buildings than any other competitor.

ILECs often argue that there are many CLECs that construct their own loops and sell loops at wholesale. When TWTC seeks to purchase loop transmission from competitive wholesalers, however, it can purchase no more than a handful of loops from each competitor. Thus, despite TWTC's best efforts to purchase local transmission facilities from competitors, it only purchases approximately **[proprietary begin] [proprietary end]** loops at DS-1 or above from competitors.

It is important to emphasize that TWTC is no more able to rely on competitive wholesalers for Ethernet service than for DS1 or DS3 service. TWTC purchases Ethernet

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[17] *See* Comments of WorldCom, CC Dkt. Nos. 01-321 et al., at 9 (Jan. 22, 2002); *AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local exchange Carrier Rates for Interstate Special Access Services*, Declaration of Kenneth Thomas, RM Docket No. 10593, ¶ 3 (Oct 15. 2002).

[18] Legacy Xspedius has a much higher percentage of off-net facilities, because its customers generally purchase lower levels of capacity.

loops from competitive wholesalers to **[proprietary begin] [proprietary end].**[19] These **[proprietary begin] [proprietary end]** represent less than **[proprietary begin] [proprietary end]** of the well over **[proprietary begin] [proprietary end]** locations to which TWTC provided Ethernet service at retail.[20]

D. Competitors' Reliance On ILEC Local Transmission Facilities Is Increasing

While the ILECs' control over bottleneck local transmission facilities is unquestionable today, there is reason to expect that competitive carriers' reliance on ILEC local transmission facilities will grow in the future. For example, customers increasingly demand that their carriers serve more of their customer locations. In the past, TWTC could limit the number of off-net buildings to which it offered Ethernet because it could focus on serving a customer's locations with on-net facilities. For example, even though a customer might have 20 locations, TWTC's network might only reach one of those locations. Now however, that same customer might demand that TWTC serve most or all of its 20 locations. TWTC normally cannot deploy its facilities to most or all of the new locations, thus causing it to rely on the ILECs' local transmission facilities to reach more locations than was the case in the past.

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[19] For a discussion of the extent to which TWTC utilized competitive Ethernet wholesalers as of last year, *See* Reply Declaration of Graham Taylor, ¶ 7 attached to ex parte presentation of Time Warner Telecom, WC Dkt. No. 06-74 (filed Aug. 8, 2006) attached hereto as Appendix A, ("*Taylor Reply Decl.*"). In addition, attached hereto in Appendix A is Graham Taylor's initial declaration, filed in the AT&T/BellSouth merger proceeding. *See* Declaration of Graham Taylor attached to Petition to Deny of Time Warner Telecom, WC Dkt. No. 06-74 (filed June 5, 2006) ("*Taylor Decl.*").

[20] **[proprietary begin] [proprietary end]** *See id.*

ILECs often argue that competitors' networks are near thousands of buildings, enabling competitors to serve these buildings with their own loops. This assertion ignores the economic realities of loop deployment.[21] As the FCC has long recognized, loop deployment is almost entirely dependant upon the relationship between the revenue opportunity available and the cost of loop deployment in each individual case. *See, e.g., TRRO* ¶ 149; *TRO* ¶ 298.

In determining whether it is able to construct a fiber lateral loop to a building that is near its fiber network, TWTC compares the revenue opportunity available at the location with the costs of construction. **[proprietary begin] [proprietary end]**

For carriers like One Communications that serve the vast majority of its customers with DS1s or a single DS3 of service, it is almost never possible to self-deploy loop facilities. Indeed, One Communications has only deployed loop facilities to no more than a handful of locations in nearly all of its markets.[22] It must therefore rely on the ILEC for virtually all of its off-net facilities.

It is also important to emphasize that competitors face the same barriers when providing packetized services such as Ethernet as they do when deploying more established TDM, OCn and Ethernet services. The economics of loop deployment do not magically improve when a different protocol is used to transmit the signal. The same trench must be dug, the same fiber must be laid and similarly priced electronics must be

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[21] In other contexts, the ILEC recognize that CLECs simply cannot deploy loops in many instances. *See, e.g.*, *CLEC Network Extension Cost Model*, Cambridge Strategic Mgmt. Group (Apr. 26, 2001), Attach. RLS-18 to Direct Testimony of Rebecca L. Sparks, SBC Texas, PUC Texas Dkt. No. 28745 (filed Jan. 27, 2004) ("*CSMG Study*").

[22] **[proprietary begin] [proprietary end]**

attached. Therefore, TDM and Ethernet services must provide the same revenue stream at a particular location to justify deployment.

E. Neither Cable Modem Service, Nor Wireless Broadband, Nor Satellite Service Constitutes a Viable Substitute For Special Access Service

The FCC has long held that cable modem service, wireless and satellite broadband are simply not capable of providing a viable alternative to traditional special access services. This continues to be true today. Thus, the existence of cable, wireless and satellite end user connections in no way diminishes the market power that the ILECs derive from their control over wireline local transmission facilities needed to serve business customers.

Cable. It is important to understand that cable companies offer two very different types of data transmission service targeting two very different product markets: (1) cable modem service, capable of serving residential and the very smallest business customers and (2) fiber-based TDM and Ethernet special access services. The latter services utilize the same types of facilities, technologies and networks used by traditional CLECs and ILECs. Therefore, fiber-based competition from cable companies cannot be considered "intermodal" competition. The FCC found as much in the *TRRO*. *See TRRO* n.514. In fact, in deploying fiber-based services, cable companies face the same high barriers to entry faced by traditional CLECs. For this reason, cable companies, like traditional CLECs, can serve only several thousand buildings with special access services.

The FCC has found that cable modem service is generally not offered in the areas where large businesses are located (*see TRO* ¶ 52) and does not offer the service characteristics demanded by business customers. *See TRRO* ¶ 193. The FCC has also held that the vast price differential between cable companies' cable modem based

services and their fiber-based services only underscores the fact that they these products belong very different market segments. *See id.* n. 119.

For example, while Cablevision charges only $49.95 per month for its up to 10/2 Mbps cable modem product,[23] it charges $1,300 per month for a 10 Mbps symmetrical fiber connection.[24] Moreover, even if cable modem service were a substitute for special access service, cable companies have no obligation to provide cable modem facilities at wholesale, and do not do so as a matter of practice.

In light of the apparently limited reach of their fiber networks, cable companies largely target the smallest of small business customers which can be served by their much more widespread cable modem service. Therefore, as the ILECs admit, most cable companies are simply not providing any competition to RBOCs or CLECs in the retail or wholesale special access marketplace. In AT&T's latest earnings call, for example, CFO Richard Linder asserted that "[i]n small and medium business...we are not seeing a lot of [competition] in the market at this point [from cable companies], other than probably from Cox who has been in the market for some time."[25] Moreover, cable companies are only targeting small businesses with "10 lines and under, maybe even four lines and under." *AT&T Q207 Transcript.* AT&T's churn to cable companies is in the single

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[23] *See* Cablevision Systems Corp., *Optimum Pricing, at* http://www.optimum.com/business/ool/pricing.jsp.

[24] *See* Cablevision Systems Corp., *Optimum Lightpath, E-Line Pricing, at* http://www.optimumlightpath.com/Interior214.html.

[25] *See* AT&T Q2 2007 Earnings Call Transcript (July 24, 2007), *available at* http://seekingalpha.com/article/42142 (*AT&T Q207 Transcript*").

digits. *Id.* For these reasons, AT&T is "not seeing a lot of impact" from cable company competition in the business market. *Id.*

Fixed Wireless and Satellite Nor do fixed wireless or satellite services offer an alternative to the ILEC local transmission facilities serving commercial buildings. The FCC recently reported that fixed wireless and satellite broadband represent less than two percent of the total high-speed lines in service.[26] Fixed wireless and satellite markets remain nascent, comprising just over one percent of the total high-speed lines in service. *See WCB Report.* Successful deployment of fixed wireless services continues to elude major license holders of spectrum. As early as 2002, the Commission reported that technical limitations, availability of capital, costs of deployment, and problems associated with building access had all caused terrestrial fixed wireless service providers to exit the market or scale back their offerings very substantially.[27] That trend has continued. For example, in 2004 the FCC touted IDT's reorganization toward using its upper millimeter band spectrum for private line services and leasing as evidence for the increasing availability of fixed wireless broadband.[28] IDT has since abandoned those plans.[29]

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[26] *See High-Speed Services for Internet Access: Status as of June 30, 2006,* Industry Analysis and Technology Division, Wireline Competition Bureau, Table 1 (January 2007) ("*WCB Report*").

[27] *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable And Timely Fashion, and Possible Steps To Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Third Report, 17 FCC Rcd 2844, App. B ¶¶ 31-39 (2002) ("*Third Broadband Report*").

[28] *See Availability of Advanced Telecommunications in the United States*, Fourth Report, 19 FCC Rcd 20549, at 22 (2004).

[29] *See* IDT Corp. SEC Form 10-K Annual Report for the Fiscal Year Ended July 31, 2006, at 2 (filed Oct. 16, 2006) ("In June 2006, we decided to halt the expansion of our IDT Spectrum operating unit and eliminated the majority of its workforce. We expect a

The bankruptcies and financial problems of major satellite service providers that serve business customers provide even more evidence for the prohibitively high costs of providing last mile satellite connections.[30] Moreover, technological factors, such as the need for clear line of sight to the south and the loss of signals in cases of heavy snow or rain, also limit the extent to which satellite offers a viable substitute for medium and large businesses. *See Third Broadband Report* ¶ 49. The Commission itself has recently recognized that "fixed wireless connections are not always technically feasible or economically feasible." [31]

It is therefore unsurprising that the GAO found that wireless technologies are simply not a viable alternative to wireline special access services.[32] As the GAO found,

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decrease in IDT Spectrum's revenues in fiscal 2007. We continue to explore strategic alternatives for the assets and operations of this business.").

[30] *See For Globalstar, Bankruptcy Is No Panacea*, Satellite News, Feb. 25, 2002 (discussing the bankruptcy filing of the satellite voice and data service company), *available at* http://siliconinvestor.advfn.com/readmsg.aspx?msgid=17113758; Jared Bazzy, *Beleaguered Satellite Industry Looks to 2002,* Telecommunications, Jan. 1, 2002 (discussing "[b]ankruptcy filings from Globalstar, an end to the planned merger between ICO and Teledesic, a divestiture from Astrolink by TRW and Lockheed Martin, and failures by Iridium and Elypso"), *available at* http://findarticles.com/p/articles/mi_m0TLC/is_1_36/ai_83150943.

[31] *See AT&T Inc. and BellSouth Corporation Application for Transfer of Control*, Memorandum Opinion and Order, 22 FCC Rcd 5662 ¶ 48 (2006).

[32] GAO Report at 18 ("Alternative supply for dedicated access can also be provided by competitors in the form of alternative technologies, such as point-to-point wireless connections. Some industry analysts when we spoke were encouraged by the prospect of fixed wireless and WiMax technology that could provide alternative dedicated access. However, according to these analysts, this technology is still being developed and has only been used in limited circumstances to replace high-capacity dedicated access connections.").

satellite and fixed wireless simply have not developed sufficiently to offer alternatives to special access.[33]

III. THE FCC'S SPECIAL ACCESS RATE REGULATIONS ARE FATALLY FLAWED

Notwithstanding the overwhelming evidence that the ILECs control the only loop facilities serving the vast majority of commercial buildings nationwide, the Commission has largely deregulated ILEC special access prices. It has done so by (1) freeing ILECs of any rate regulation in metropolitan statistical areas in which they meet triggers that bear no relationship to the amount of facilities-based competition in the area and that are fatally flawed in other respects; and (2) failing to effectively regulate the prices of even those ILEC special access services that remain subject to rate regulation.

A. The FCC's Special Access Pricing Flexibility Triggers Are Incoherent.

The existing pricing flexibility triggers are incoherent in many respects. *First*, they utilize an inappropriate geographic market, since they deregulate ILEC special access prices throughout an MSA based on indications of competitive entry in only a subset of the MSA. For example, to obtain Phase II pricing flexibility (*i.e.,* the elimination price caps) for interoffice transport throughout an MSA, an ILEC need only show that one collocated carrier using non-ILEC interoffice transport is present in 50 percent of the wire centers in an MSA or in wire centers representing 65 percent of the ILEC's transport revenues in an MSA.[34] To obtain Phase II pricing flexibility for special

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[33] *See TRRO* n.508 ("The record does not indicate that other intermodal options, such as fixed wireless and satellite, offer significant competition in the enterprise loop market.").

[34] *See Access Charge Reform, et al.*, Fifth Report and Order and Further Notice of Rulemaking, 14 FCC Rcd 14221, ¶¶ 148-49 (1999) ("*Pricing Flexibility Order*").

access channel terminations throughout an MSA, an ILEC need only show that one collocated carrier using non-ILEC transport is present in 65 percent of the wire centers in an MSA or in wire centers representing 85 percent of the ILEC's channel termination revenues in the MSA. *See Pricing Flexibility Order* ¶ 150. The ILECs themselves have asserted that their special access revenues are often concentrated in a relatively small number of wire centers within a metropolitan area. *See Verizon New York MSA Petition* at 19. This means that an ILEC can meet the Phase II triggers and escape rate regulation throughout the MSA by demonstrating that fiber-based collocations exist in a very small number of wire centers within the MSA. As the FCC has itself concluded, "this test provides *little indication* that competitors have self-deployed alternative facilities, or are not impaired outside of a few highly concentrated wire-centers." *TRO* ¶ 397 (emphasis added).

Second, the special access regulatory framework fails to account for important distinctions among special access product markets. For example, the current rules differentiate only between (1) connections to customer premises (channel terminations) and (2) other dedicated transmission facilities. Yet, as the Commission has concluded over and over, the differences in revenue opportunities among different levels of capacity (*e.g.*, between a DS1 and OC48) dictate that certain capacities are suitable for competitive supply, while others are not. *See, e.g., TRRO* ¶ 149; *TRO* ¶ 298. This failure to incorporate capacity into the pricing flexibility analysis leads to numerous false positives; assumptions that a service is subject to competition when in fact it is not.

Third, the use of collocations as proxies for competitive entry is clearly inappropriate.[35] The problem with relying on collocations as a proxy for competition is most obvious with regard to loops. This is so because collocations can be deployed where there is no competitive loop deployment and loop deployment can occur in locations distant from collocations. When a competitor collocates in an ILEC wire center, it does so primarily for the purpose of gaining access to the ILECs' special access channel termination circuits or unbundled loops, *not* for constructing its own loop facilities. For example, there are many carriers such as One Communications that collocate in ILEC wire centers in order to serve their customers nearly exclusively via ILEC DS1 and DS0 loops. Since DS1s and DS0 loops cannot generally be competitively supplied, One Communications must satisfy its demand with ILEC facilities. *See id.* Indeed, One Communications has deployed in over 700 collocation arrangements **[proprietary begin] [proprietary end]** Conversely, for carriers like TWTC that do construct loop facilities in certain circumstances, collocations are a poor proxy for determining where deployment is possible. For example, as the Commission has recognized, competitive carriers like TWTC generally deploy facilities to commercial

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[35] The Commission admitted in the pricing flexibility order itself that collocation-based triggers might present an inaccurate picture of competitive loop deployment. *See Pricing Flexibility Order* ¶ 103 ("As a number of parties indicate, a competitor collocating in a LEC end office continues to rely on the LEC's facilities for the channel termination between the end office and the customer premises, at least initially, and thus is susceptible to exclusionary pricing behavior by the LEC, and so collocation by competitors does not provide direct evidence of sunk investment by competitors in channel terminations between the end office and the customer premises."). The Commission chose to use such a test merely because "it appear[ed] to be the best option available . . . at th[at] time." *Id.*

buildings from splice points in their fiber transport rings, (*see TRRO* ¶ 153) which may be many miles away from the closest end-office in which the carrier has collocated.

Fourth, the triggers include no mechanism for reviewing the extent to which collocators continue to compete in an MSA. Once an ILEC demonstrates that it has met a trigger in an MSA, it is freed from regulation in the future even if the collocators upon whom it relied to meet the triggers exit the market or are acquired by the ILEC itself. This is obviously highly relevant now that AT&T and Verizon have acquired legacy AT&T and MCI, the two carriers that likely had more fiber-based collocations than any other competitors.

B. In Adopting The Special Access Pricing Flexibility Triggers, The Commission Relied On Assumptions That Have Since Been Disproven.

Despite some misgivings regarding the accuracy of its triggers, the Commission was willing to establish its pricing flexibility framework based on several assumptions regarding the nature of the special access market and regulations. These assumptions, however have since proven to be incorrect. Most importantly, the Commission assumed that special access inputs would be most crucial to IXCs, not CLECs: "[W]e note that these services generally are purchased by IXCs." *Pricing Flexibility Order* ¶ 155. *See also id.* ¶ 142. The Commission did not even consider the possibility that competitive providers of local exchange and special access services would themselves purchase loops and transport from ILECs under special access tariffs. In explaining why ILECs would be unlikely to exploit pricing flexibility to discriminate unreasonably among special access customers, the Commission emphasized that IXCs are large businesses that purchase special access and "generate significant revenues for the incumbent and are not without bargaining power with respect to the incumbent." *Id.*

Moreover, the FCC also assumed that ILECs would sell special access to competitors only in markets where the ILECs' own downstream retail offerings were subject to separate affiliate requirements.[36] Throughout the *Pricing Flexibility Order*, the Commission referred to ILEC in-region long distance offerings as provided through "affiliates" (*see, e.g., id.* ¶¶ 129, 134-35). The FCC even established special protections against ILEC price discrimination in the provision of special access that are only relevant where the ILEC provides retail service through a separate affiliate.[37] Of course, no such protections apply in the local and special access markets in which ILECs provide service on an integrated basis. This is of course precisely the context in which competitors like TWTC and One Communications purchase special access from ILECs.

More fundamentally, in adopting its pricing flexibility rules, the Commission relied on the key assumption that incumbent LECs would not be able to sustain price increases in areas in which competitors have established fiber-based collocations because the competitors would simply expand their entry to undercut the incumbents' prices. But this assumption is clearly incorrect, especially with respect to high capacity loops. As explained, competitive deployment of last mile facilities has been minimal, and as explained below, ILEC prices are well above the level that would be expected in a competitive marketplace.

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[36] For example, the FCC assumed that BOCs would be providing in-region long distance through Section 272 2 affiliates "[o]nce the Commission grants BOCs permission, pursuant to section 271 of the Act, 47 U.S.C. § 271, to provide in-region long distance services, they are required to offered those services through separate affiliates." *Pricing Flexibility Order* n.345.

[37] *See id.*¶ 129 (prohibiting an ILEC from offering a contract tariff to an affiliate unless and until an unaffiliated customer first purchases service pursuant to the contract).

Accordingly, contrary to the Commission's assumption in the pricing flexibility order,[38] competitive carriers cannot quickly increase supply to counter high ILEC special access prices. In other words, the combination of very high entry barriers and low competitive carrier capacity means that the elasticity of supply for high capacity loops is extremely low, enhancing the ILEC's market power.

There is no clearer illustration of the ILECs' ability to sustain high prices without risking significant market share loss that Qwest's special access price increases in 2004. .[39] As a result of those increases, TWTC's prices for special access in Qwest's region increased by approximately 19 percent. Unsurprisingly, the increases were greatest for DS1 facilities which are the least likely to face competitive supply. For example, TWTC faced rate increases of nearly 25 percent for rates applicable to DS1 channel terminations in "the most competitive" zone 1 as well as for rates applicable to 0-8 mile mileage DS1 transport. Notwithstanding these price increases, neither TWTC nor any other competitor has been able to accelerate its deployment of local transmission facilities in the Qwest region. There is no clearer illustration of ILEC market power.[40]

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[38] *Id.* ¶ 144 ("If an incumbent LEC charges an unreasonably high rate for access to an area that lacks a competitive alternative, that rule will induce competitive entry, and that entry will in turn drive rates down.").

[39] *See* Revisions by Qwest Corporation to Tariff FCC No. 1, Transmittal No. 206. TWTC had previously opposed the Qwest tariff as not just and unreasonable under section 201(b). *See* Petition of Time Warner Telecom to Reject, or Alternatively, Suspend and Investigate, Revisions by Qwest Corporation to Tariff F.C.C. No 1, Transmittal No. 206 (filed Aug. 23, 2004).

[40] *See Noel D. Uri & Paul R. Zimmerman, Special Access Services and its Regulation in the United States,* 6 J. OF POLICY, REGULATION, AND STRATEGY FOR TELECOMMUNICATIONS, 127 (2004) ("Market Power is the ability of a LEC to sustain prices above the competitive level for an extended period of time without significant loss in customers. Market power can be inferred when a firm is able to implement a price

In sum, given the flaws in these triggers, it is unsurprising that they are terrible predictors of the presence of competition within an MSA. As the GAO concluded, the FCC was wrong in its predictive judgment that its triggers would accurately estimate those areas where competition was sufficient to restrict ILEC market power, has been wrong.[41] To the contrary, "[t]he data . . . show that the theoretically more competitive Phase II areas generally have a lower percentage of lit buildings than phase I areas." GAO Report 12-13. Clearly, the pricing flexibility triggers do not capture where competitive deployment has actually occurred.

C. The Commission's Price Cap Regime For Special Access Is Flawed

The Commission's price cap rules governing special access services are themselves insufficient to constrain ILEC exploitation of their market power over special access. The obvious problems derive from the flaws in the Commission's *CALLS Order*. In the CALLS plan, the ILEC participants (including all of the BOCs) agreed to establish a separate price cap basket for special access and to set a 6.5 percent X-Factor (net of inflation) for that basket. The Commission acceded to this commitment without any modifications.

Unfortunately, in so doing, the Commission agreed to two components of the special access regulatory regime set forth in CALLS that were obviously flawed. One

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increase absent a significant increase in costs or quality. *This sort of evidence is especially indicative when the prices that are high and rising relative to economic costs fail to attract new competitors or when entry into the market remains essentially foreclosed.*") (emphasis added) ("*Uri & Zimmerman*").

[41] GAO Report at 42 ("[O]ur analysis of facilities-based competition suggests that FCC's predictive judgment — that MSAs with pricing flexibility have sufficient competition — may not have been borne out, particularly for channel terminations to the end users of dedicated access.").

problem was that, under the plan, the X-Factor was discontinued as of the ILEC access tariff filings on July 1, 2004. From that date on, the X-Factor for the special access basket equaled inflation.[42] This policy seems to have been based on the Commission's assumption that competition would emerge to constrain ILEC special access prices and drive them down. *See CALLS Order* ¶¶ 36, 44 (describing CALLS as a transitional plan until competition develops sufficiently to control ILEC prices). As is now abundantly clear, this never happened.

The other problem with the manner in which the 6.5 percent X-Factor applied to the special access basket under CALLS is that, in the many MSAs in which ILECs received Phase II pricing flexibility prior to July 1, 2004, even the limited rate reductions required by the CALLS plan did not take full effect because Phase II MSAs are not subject to price caps at all. Yet, as is also now abundantly clear, the triggers for Phase II pricing flexibility are poor predictors of where competition is sufficient to constrain ILEC prices.

As a result of these limitations, the rate reductions required for the special access price cap basket by operation of the 6.5 X-Factor under the *CALLS Order* were insufficient to ensure that ILEC special access prices were brought within a zone of reasonableness. As the ILECs experienced higher and higher volumes of special access sales, and thus higher and higher economies of scale and scope, its prices were allowed to remain at their high levels. In real terms, the ILECs' prices increased dramatically during this time period, as the data regarding regulated rates of return demonstrate.

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[42] *See Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers*, Sixth Report and Order, 15 FCC RCd 12962, ¶ 149 (2000), *subsequent history omitted* ("*CALLS Order*").

D. The Commission Has Failed To Regulate ILEC Rates For Ethernet Service

While the FCC's regulatory regime has been fatally flawed with regard to services subject to pricing flexibility and price caps, it has been even worse for Ethernet services that were in some cases never or only recently subject to price caps.

As an initial matter, it is important to note that the FCC's public notice implies that Ethernet and other packetized transmission services are "unregulated" and do not qualify as special access services.[43] This is simply not the case. The FCC has repeatedly classified packetized transmission services as special access services, nearly all such services are now subject to the special access pricing flexibility regime, and, with the exception of Verizon's packetized services, are subject to full Title II regulation. For example, in recently granting Qwest pricing flexibility for its Metro Optical Ethernet Service, the FCC held that "good cause exists to permit Qwest to exercise pricing flexibility for advanced services that rely on packet technology, similar to the pricing flexibility relief that it has for *other special access services*."[44] Clearly, the FCC believed that Qwest's Ethernet service was simply another type of special access service regulated under Title II. Indeed, the order granted a waiver to Qwest of rules 1.774, 69.709, 69.711, and 69.727 applicable to common carrier special access services so that Qwest

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[43] *See Public Notice,* at 2 (rel. July 9, 2007) ("To assist in the assessment of the reasonableness of rates for special access services, we ask parties to supplement the record with information on vendor prices for high capacity transmission equipment, outside plant, fiber, and fiber installation, and on prices for nonregulated services that provide similar or equivalent capabilities to special access services, such as Ethernet and packet-based services.").

[44] *Qwest Petition for Waiver of Pricing Flexibility Rules for Advanced Communications Networks Services*, Order, 22 FCC Rcd 7482, ¶ 5 (2007) (emphasis added) ("*Qwest Price Flex Order*"); *Id.* ¶ 7 ("These advanced services are special access services...").

could keep its Metro Optical Ethernet Service outside of price caps while still obtaining the benefits of pricing flexibility. *See id.* n.20. Moreover, Qwest itself has recently argued that its packetized services, like Verizon's, are in fact special access services.[45]

Despite the fact that packetized special access services remain regulated under Title II, for years, the FCC has treated many packetized and specifically Ethernet services as outside of price caps. Regulation actually varied by BOC. For example, BellSouth received pricing flexibility for its packetized services essentially by accident in 1996. As the FCC explained, because BellSouth included the contested packet-switched services in price caps in its 1996 annual price cap tariff filing pursuant to Section 61.42(g) and the services were subject to the Bureau's scrutiny, the Commission concluded that BellSouth's packet-switched services were properly "regulated under price caps" and thus "were eligible for pricing flexibility."[46] Packetized services sold by SBC's advanced services affiliate became eligible for price caps in 2002.[47] Just this year, the FCC granted AT&T pricing flexibility for its OPT-E-MAN Ethernet service which had not been sold

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[45] *Id. at* n.25 (*citing* Qwest Petition for Waiver of Pricing Flexibility Rules for Advanced Communications Networks Services, WC Docket No. 06-187, at 2 (filed Sept. 22, 2006) ("explaining that, like Verizon's packet-based advanced services, Qwest's advanced services are special access services because they use "dedicated facilities that enable an end-user customer to connect two or more of its locations.") (citations omitted)).

[46] *See BellSouth Petition for Pricing Flexibility for Special Access and Dedicated Transport Services,* Memorandum Opinion and Order, 16 FCC Rcd 18174, ¶ 15 (2001).

[47] *See SBC Communications Inc., Petition for Waiver of Section 61.42 of the Commission's Rules,* Order, 22 FCC Rcd 7224, ¶ 3 (2007) ("In 2002, the Commission relaxed pricing restrictions for AT&T by forbearing from tariff regulation of its advanced services in areas then served by SBC on the condition that it provide these services through a separate affiliate. This allowed AT&T to exercise pricing flexibility for these services by offering them through its affiliate, Advanced Solutions, Inc. (ASI), rather than through its LECs.") (citations omitted).

through its advanced service affiliate.[48] Importantly, AT&T's OPT-E-MAN Ethernet Service and Qwest's Metro Ethernet Service, continue to be offered *outside of price caps* even though the FCC has granted pricing flexibility for these services.[49] Therefore, many Ethernet services were *never* subject to X-Factor driven rate reductions over the many years when the X-Factor was set above inflation. This is the central reason why ILEC tariffed Ethernet rates are priced at such exorbitantly high levels and why, as described below, even "discounted" Ethernet services are too expensive to permit TWTC to rely on them as inputs for TWTC's retail services.

IV. ILECS HAVE USED THEIR MARKET POWER AND FREEDOM FROM REGULATION TO SET SPECIAL ACCESS RATES AT SUPRACOMPETITIVE LEVELS

As a result of their market power over local transmission facilities, the lack of intermodal alternatives and ineffective rate regulation, the ILECs have charged exorbitant rates for special access. Even the ILECs admit that their month-to-month tariff rates are extremely high. Yet they argue that few customers pay these rates, because customers can-opt into discount plans. This point is both true and unconvincing since the discounted prices are still well above what competitors charge in the few instances where

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[48] *See id.* ("AT&T, however, also offers some advanced services through its LECs that do not qualify for the 2002 forbearance relief. Accordingly, with this petition, AT&T seeks authority to place into price caps those packet-switched services that its LECs offered outside of price cap regulation, so that these services could subsequently qualify for pricing flexibility. Specifically, AT&T requests the ability to exercise pricing flexibility for its Optical Ethernet Metropolitan Area Network (OPT-E-MAN) service, which it offers through its LECs, and for new packet-based advanced services that it may offer through the AT&T LECs in the future.") (citations omitted).

[49] *See id.* n. 30 ("As an initial matter, we find it unnecessary for AT&T's LECs in areas formerly served by SBC to incorporate these services into price caps before they are eligible for pricing flexibility."); *see also Qwest Price Flex Order* n. 20.

competitive alternatives are available and, as explained in the next section, the discounted offers are available only to purchasers who make commitments that effectively preclude the development of wholesale competition.

ILECs offer three basic types of discount plans: (1) "Term" discounts that require no monetary or circuit commitment, but generally offer the smallest discount and often lack key benefits such as circuit portability; (2) "Standard" discounts that are available to any qualifying purchaser, that generally require a minimum circuit commitment level, and that apply to both Phase II and price cap rates[50] and (3) "Overlay" discounts that are individually negotiated with a particular purchaser and then filed as contract tariffs. Overlay tariffs provide small discounts that apply to Phase II rates on top of any "Standard" or "Term" discounts. Despite these discounts, ILEC rates are almost universally higher than UNE rates, and are often two times higher than most competitive wholesale providers' (including TWTC's) rates in both Phase II and price cap areas, especially for circuits with any interoffice mileage. If the special access market were truly competitive, this price differential simply would not exist.

A. ILEC Prices For Special Access Are Higher In Phase II MSAs Than In MSAs That Remain Subject To Price Caps

The increase in special access rates under pricing flexibility has been studied and documented in excruciating detail. As early as 2004, FCC economists Paul R.

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[50] Certain carriers, only offer term plans for certain elements. For example, AT&T (in its former BellSouth and SBC regions) only offers a term discount plan for DS3; there is no "Standard" discount.

Zimmerman and Noel Uri conducted an extensive study of ILEC special access pricing practices. In their study, Zimmerman and Uri explained that, while special access provided only a 7.4 percent rate of return to the ILECs in 1996, this had climbed to 37.1 percent in 2003. *See Uri & Zimmerman* at 126. They also found that ILEC special access revenues nearly quadrupled from $3.1 billion in 1996 to $12 billion in 2002. *See id.* Over this same time period, special access lines grew as a percentage of all access lines from 8.9 percent to 41 percent. *See id.* As Messrs Zimmerman and Uri noted, it runs counter to economic theory that prices would continue to rise as output increases in a market (such as special access) characterized by substantial economies of scale and scope.[51] The only reasonable inference is that the special access market is not competitive. *See id.*

In addition, by scrutinizing DS1 and DS3 channel mileage and termination rates (not merely rates of return), Zimmerman and Uri were able to determine that rates under pricing flexibility increased substantially for almost every BOC, in almost every pricing flexibility market for both month-to-month offerings as well as for rates subject to long term commitments. *Id.* at 156-7. They concluded that "LECs subject to price caps who have been granted pricing flexibility have taken advantage of the opportunity...To a greater or lesser degree, depending on the individual LEC, rates have been raised by LECs in an environment where these LECs are already earning rates of return substantially in excess of what they would earn in a competitive market." *Id.* at 157.

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[51] *See Uri & Zimmerman* at 157 ("In a competitive market where demand for special access service is growing, as characterized by the growth in special access revenue, this should result in the rates actually falling. The fact that no rates have declined and that many have increased is further evidence that the price cap LECs are exercising market power and that the market for special access service is not competitive.").

The GAO has reached similar conclusions regarding the failure of the pricing flexibility regime to constrain ILEC market power. As the GAO concluded, list prices in Phase II areas "are higher than average list prices in phase I and price-cap areas." *GAO Report* at 13.

Furthermore, special access purchasers have already placed substantial evidence on the record in this proceeding demonstrating that month-to-month and term tariff rates have nearly universally increased in Phase II areas to levels higher than is the case in price cap markets. In its study of RBOC rates, WilTel concluded that "the pricing of channel terminations in pricing flexibility areas substantially exceeds price cap pricing for virtually all ILECs and contract terms investigated." *Wiltel Reply* at 19. Global Crossing has demonstrated that DS1 channel termination rates are 22 to 47 percent higher in Qwest Phase II areas than price cap areas while DS1 mileage rates are 13 to 71 percent higher in BellSouth Phase II areas than price cap areas.[52]

[proprietary begin] [proprietary end] This would simply not be the case if competition were truly pushing down prices in those Phase II areas allegedly subject to competition.

B. ILEC Discounted Prices Are At Least 2-3 Times Higher Than Prices Charged By Competitive Wholesale Providers Of Special Access Service

Even the prices ILECs offer under their Standard and Overlay discount plans are well in excess of competitive wholesale prices; often two to three times as high and

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[52] *See* Reply Comments of Global Crossing et al., WC Dkt. No. 05-25 at 7 (filed July 29, 2005).

sometimes even more for circuits with substantial mileage.[53] This is true with regard to both TDM and Ethernet services and in price cap as well as Phase II markets.

To begin with, as Broadwing has observed, competitive wholesalers offer shorter contract terms (generally one year) and do not have minimum volume commitments. *See* Broadwing Comments at 26-27. **[proprietary begin] [proprietary end]**

DS1 and DS3 Pricing. Even when all available discounts are taken into account, TWTC must pay the ILECs monopoly rates in nearly every market they compete. The charts below compare average competitive wholesale prices, including TWTC's prices to ILEC prices per element in "zone 1" averaged over all the states where TWTC purchases service in a BOC region. Zone 2 and 3 areas exhibit substantially higher prices. **[proprietary begin] [proprietary end]** Finally, the charts below also provide average UNE prices TWTC pays across the relevant BOC region. **[proprietary begin]**

[proprietary end] It is important to emphasize that many carrier customers pay special access rates far in excess of the rates TWTC pays. **[proprietary begin]** **[proprietary end]** As the charts attached hereto as Appendix B indicate, the penalty for not signing up for the longest available term or discount plan can be substantial. *See* Appendix B.

OCn Service. ILECs retain pricing power over OCn level services as well. Although CLECs are generally able to provision OCn circuits more easily than DSx

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[53] This is what former FCC economist Joseph Farrell foresaw when he stated that, "[w]hen the basic month-to-month plan specifies prices significantly above the competitive level, these discounted prices (and discounted prices in other plans) can also be above competitive levels." Reply Declaration of Joseph Farrell ¶ 4, attached to reply comments of CompTel *et al.*, WC Dkt. No. 05-25 (filed July 25, 2005) ("*Farrell Reply Decl.*").

circuits because of the increased revenue opportunity, there are still many buildings for which the ILEC is the sole provider of OCn on-net connectivity. As the GAO found, less than 25 percent of buildings demanding 2-DS3s *or more* of traffic are served by competitors. It is therefore economically rational for ILECs to increase the price of OCn circuits to monopoly levels even though they may lose some customers in those few buildings where competitors are present and offer lower prices.

High OCn rates are compounded by the fact that ILECs generally do not offer discount plans for such services. The result is extremely high ILEC prices, particularly in markets no longer subject to price cap regulation. Competitive wholesale prices for OCn services are much lower in nearly all cases. **[proprietary begin] [proprietary end]**

Qwest OC-3 (1 Year)

	0 Mile	5 Mile	10 Mile
Price Cap	3578.66	4063.66	4548.66
Phase II	6510	7235	7960

[proprietary begin]

[proprietary end]

Ethernet service. ILEC "discounted" Ethernet prices are also well in excess of competitors' wholesale rates. **[proprietary begin] [proprietary end]**

C. ILEC Pricing Practices In Long Haul Markets Illustrate Their Pricing Practices In Competitive Markets.

High prices for ILEC local services stand in marked contrast to ILEC prices for long haul transmission services. In markets like long-haul where ILECs do not have market power, their prices are, in line with competitors. Those services share many of

the basic technical characteristics of local transmission. But, on long-haul transmission routes where competition is ubiquitous, prices have fallen more than 90 percent since 1999.[54]

ILECs' as well as competitors' long haul rates have fallen in equal measure and are largely within the same pricing range . It is revealing that the ILECs' monthly charge for a DS3 channel termination, before any mileage charge component is added, is about the same as the monthly charge for a 1000 mile DS3 long-haul circuit. **[proprietary begin] [proprietary end]**

D. The ILECs' Reliance On Prices Per Voice Grade Equivalent Is Unpersuasive.

In an attempt to demonstrate that, contrary to all available evidence, special access rates have declined, the ILECs have argued that their average revenue per voice grade equivalent line ("VGE") (i.e. per DS0) has declined. But this is just a red herring.

Unsurprisingly, because VGEs are never sold in the real world, the revenue per VGE has little bearing on the price of actual special access services. Rather, the gradual decrease in ILEC revenues per VGE is simply a function of increased customer demand for capacity. As such demand increases, customers shift to higher bandwidth facilities.[55] These higher bandwidth facilities are, not surprisingly, less expensive on a per VGE basis. This is so because, as the FCC has recognized, the cost of increasing bandwidth is

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[54] *See, e.g., Comments of T-Mobile USA, Declaration of Simon J. Wilkie, WC Dkt. No. 05-25, RM-10593,* ¶ 12 (June 13, 2005) ("Consider the market for DS3 (45 Mbps) level transport from New York to Los Angeles, a distance of approximately 2,500 miles. In June 1999, such a circuit would be leased for $55,000. In February 2004, the price was $3,500 per month. This represents a decline of over 90 percent.").

[55] This dynamic is explained at length by economist Lee Selwyn. *See generally Selwyn Declaration*, *supra* note 13.

minimal compared to the fixed costs of laying the fiber in the first place.[56] Therefore, even though an OC-12 is equal to 336 DS-1s of capacity, prices for OC-12 circuits are much lower than 336 times the price for a DS-1. **[proprietary begin] [proprietary end]**

Importantly, increased demand for bandwidth yields lower ILEC revenue per VGE *even if the ILEC increases its prices*. As more customers buy more OCn services, the price per VGE falls regardless of the ILEC's prices. Because OC-12 circuits cost less on a VGE basis than a DS1, DS3 or OC-3, purchasers will switch to an OC-12 once the cost of multiple OC-3s exceeds the cost of a single OC-12. The fact that an OC-12 is, on a per VGE basis less expensive than a DS-1 or DS-3 is irrelevant to the fact that ILEC DS-1, DS-3 and OCn prices are set at a monopoly level and are increasing. It is easy to imagine a scenario in which an ILEC would increase all of its prices by the same amount over time while customers (with low price elasticity of demand, as is generally the case) require and purchase circuits of ever-greater capacity, with the result that the ILEC receives less revenue per VGE. Revenue per-VGE is therefore utterly irrelevant to the question of whether an ILEC has increased its prices or retained prices at monopoly levels.

V. HIGH ILEC SPECIAL ACCESS PRICES HARM CONSUMER WELFARE BY REDUCING THE SIZE OF COMPETITORS' ADDRESSABLE MARKETS

Not only do higher ILEC prices result in dead weight consumer welfare losses like any other monopoly rents collected by a dominant firm, they also have the longer

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[56] *See* TRO ¶ 312 ("Once the significant fiber construction cost is incurred, the record reflects that it is relatively easy and inexpensive to install fiber strands in excess of current demand at that time to maximize the use of the conduit and avoid the need to incur duplicate costs to retrench the same collocation in the future if demand for additional fiber facilities occurs.").

term effect of limiting the extent to which competitors can compete. This is because, even after applying all applicable discounts, ILEC prices are simply too high to permit competitive entry in many instances.

This is especially so for Ethernet services. ILECs demand that competitive carriers pay thousands of dollars for a 1 Gbps cross-connect facility in the ILECs' central offices if a wholesale purchaser wishes to transmit traffic between customer locations served by a purchaser's on-net Ethernet loops and special access Ethernet loops leased from the ILEC. **[proprietary begin] [proprietary end]**

In this way, high ILEC prices prevent TWTC from serving retail customers at locations to which it is not economical for TWTC to deploy its own facilities. As customers increasingly demand that their carriers serve a higher and higher percentage of their locations, TWTC's addressable market for Ethernet shrinks accordingly.

VI. THE ILECS HAVE ENGAGED IN EXCLUSIONARY PRICING PRACTICES TO PREVENT WHOLESALE COMPETITION IN THE PROVISION OF SPECIAL ACCESS FROM DEVELOPING.

The limited discounts offered by ILECs come at a substantial cost. In order to obtain such discounts, wholesale purchasers must knuckle under to unreasonable terms and conditions that bear no relationship to efficiencies yielded by volume or term commitments. These include minimum and escalating volume commitments to maintain the same discount, and explicit and *defacto* restrictions on buying from competitors and purchasing UNEs. These conditions leave competitors no choice but to both forgo purchasing from competitive wholesale suppliers in those few locations where such alternatives exist.

Despite these onerous terms and limited discounts, carriers like TWTC simply must sign up for them: it cannot afford ILEC month to month rates, it cannot build its

own facilities in many cases, and competitive wholesalers are simply not present at most locations. In this sense, these contracts often serve as anticompetitive tying arrangements--tying access to those circuits that are only available from the monopolist (the tying product) to the portion of the CLEC's demand that could be fulfilled by competitive providers (the tied product).

These discounts are structured to ensure that monopoly rates are maintained while keeping CLEC traffic on the ILECs' networks. Economic theory teaches that even a monopolist has an upper price limit. Above that price, the monopolist cannot force buyers to purchase services. Yet, the high month-to-month tariff rates are actually set *above* the monopoly price. Purchasers can obtain the monopoly price, which, as discussed above, is often two to three times higher than competitive wholesale rates, only by signing up for the discount plans. As former FCC Chief Economist Joseph Farrell has explained: "[W]hen a monopoly offers proportional or relative discounts off its undiscounted prices in order to induce customers to agree to exclusionary provisions, it has an incentive to set the undiscounted price above even the monopoly level (because rather than simply deterring demand, an increase above the monopoly level steers customers into the discount plans and also brings the discount prices closer to the monopoly level."[57]

A. ILEC Standard And Overlay Discount Offers Lock In CLEC Demand

The terms of ILECs' Standard and Overlay discount offers are extremely onerous and anticompetitive.[58] For example, AT&T's current Overlay contract with TWTC does

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[57] *See Farrell Reply Decl.* ¶ 4.

[58] A more detailed description of the discount plans are provided in Appendix C.

not permit TWTC to purchase more than a minimal number of UNEs. If TWTC fails to meet this condition, it loses the offered discounts.[59] TWTC's contract is not unique; numerous AT&T contract tariffs including the "MVP" plan contain a similar requirement.[60] The FCC found that 11 CLECs subscribed to the MVP plan in SBC's region prior to its merger with AT&T.[61] Although at the time it signed its Overlay contract with AT&T in 2005, TWTC was one of the few carriers that did not purchase UNEs,[62] it seems extremely unlikely that at least 11 carriers in AT&T's region would willingly give up their right to obtain transmission facilities at forward looking prices if AT&T did not continue to retain market power over the special access inputs needed by carriers to compete.

The AT&T Standard and Overlay discounts also have the effect of preventing CLECs from purchasing local transmission facilities from competitive wholesale providers. For example, Professor Pelcovtiz examined an SBC "MVP" contract, which has a similar structure to the TWTC/AT&T overlay contract.[63] Indeed, many of AT&T's

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[59] *See* SWBT Tariff F.C.C. No. 73 § 41.48.3 (E) (explaining that CLEC customers can only purchase two percent of their access services from SWBT as UNEs or they will lose the discount on special access services).

[60] *See* SWBT Tariff F.C.C. No. 73 § 38.3(C) (explaining that CLEC customers can only purchase five percent of their access services from SWBT as UNEs or their they will lose the discount on special access services).

[61] *SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, Memorandum Opinion & Order, 20 FCC Rcd 18290, ¶ 43 (2005).

[62] After its recent merger with Xspedius TWTC now serves many of its customers with UNE loops.

[63] *See* Declaration of Michael Pelcovitz, attached to WorldCom Reply Comments, RM-10593 (filed Jan 23, 2003).

current contract tariffs are variants of the MVP plan. Like TWTC's overlay contract with AT&T, the MVP plan (1) resets the minimum annual revenue commitment, ("MARC") to a higher level based on prior spending even though the discount level is not related to the level of the MARC; (2) mandates that, if the customer misses the MARC, the customer must pay the difference between the amount purchased and the MARC or face substantial termination penalties and liabilities; (3) precludes the customer from purchasing more than a minimal number of UNEs; and (4) provides limited discounts (TWTC receives 5-12 percent discounts off of the Standard discount rate;[64] the MVP plan scrutinized by Prof. Pelcovitz provides 9-14 percent discounts) based not on the amount of spending, but rather the year of the plan.

Professor Pelcovitz concluded that the MVP plan (and therefore the TWTC Overlay contract) is an example of ILEC exclusionary pricing that prevents wholesale competition from developing. This is because, even though TWTC and other competitive wholesalers offer lower rates than AT&T offers under its cumulative discounts, CLEC purchasers are often precluded from moving any of their spending to the CLEC due to the risk of missing the MARC. According to Professor Pelcovitz, under the MVP plan, in order to overcome lost discounts and termination penalties, it would only be rational for a CLEC purchaser to shift 20 percent of its demand to competitive wholesalers only if the competitor could provide discounts from *45 to 70%* off of the ILEC's rates. *See id.* at 15. These discounts would have to be sustained by the competitive wholesaler over the life of the MVP contract. A competitive wholesaler would need to offer similar discounts to

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[64] Pursuant to the AT&T/BellSouth merger conditions, TWTC chose to freeze the MARC and therefore froze its discount at 5 percent.

make it rational for customers subject to TWTC's overlay discount to purchase from the competitor.

B. ILEC Standard Discounts Have Similar Anticompetitive Effects

While the ILEC Overlay tariffs generally contain a MARC, the ILECs often note that any CLEC can qualify for the substantial discounts offered by the ILEC Standard discounts, regardless of their spending levels. In fact, these discounts are not available for packetized Ethernet services or OCn services. Where available, these tariffs have anticompetitive effects just like the Overlay offers. Like the Overlay contract tariffs, the Standard offers provide a discount off of the month-to-month rates to still extremely high levels while "locking-in" nearly all of a customer's demand with the ILEC.

The common denominator of all of the Standard discount offers is a circuit commitment based upon the customer's purchases at the time the agreement is signed. Over the term of the contract (which can be as long as 7 years in the case of Verizon), the purchaser must maintain purchases at or near the original commitment level. Some contracts, particularly AT&T's, reset the commitment level if a certain circuit maximum in passed. For example under the AT&T (Pac Bell) DS1 Term Pricing Plan, TWTC must maintain between 80 and 124 percent of its circuit commitment over the life of the contract. That is, if TWTC purchased 100 DS1 circuits at the time the contract was initiated, it must maintain a purchase level of between 80 and 124 DS1s for the life of the contract. If TWTC purchases fewer than 80 circuits in a particular year, it will face a shortfall penalty. If TWTC purchases more than 124 DS1s in a particular year (say 150 DS1s), the commitment will reset so that the following year, TWTC must purchase 80 percent of 150 DS1s (120 DS1s) or risk a shortfall penalty or contract termination the following year.

From the perspective of the ILEC, a commitment without a MARC or volume of circuit minimum seems odd -- TWTC will receive the *exact same percentage discount* from the ILEC regardless of whether it purchases 5 DS1s for the life of the contract or 5000. Such a discount scheme would at first blush seem inefficient from the ILEC's perspective because the discount is obviously not related to any ILEC economies of scale.

Yet this line of thinking misses the ILECs' objective. While ILECs might incur extra expense in providing discounts to low volume customers, it is plainly worth their while to do so because these contracts effectively lock-up CLEC demand. The purpose of AT&T's and other ILECs' similar Standard discounts is to prevent any special access purchaser, regardless of size, from ever shifting more than a minimal portion of their demand to a competitive wholesale provider even if the competitor's prices are lower.

For example, the Qwest RCP plan sets a 90 percent circuit commitment in exchange for a 22 percent discount off of month-to-month rates. If a carrier wanted to shift part of its demand to a competitive wholesaler, it would be in danger of missing its commitment. This danger is amplified if the CLEC purchaser's demand remains stagnant or decreases. For example, if a purchaser had a 100 DS1 circuit commitment under the RCP plan, it shifted only 5 circuits to a competitive wholesaler and lost 6 circuits because of customer disconnects, it would fall below its 90 percent commitment and face penalties and lost discounts. Standard discount offers like the Pac-Bell plan described above that reset the commitment at a higher level if the CLEC purchases "too many" circuits has the exact same "lock-up" effect.

At lower levels of demand, these commitments present substantial problems for CLEC purchasers. In that case, small circuit fluctuations can make the CLEC miss its

commitment levels. This is especially so if the contracts do not offer circuit portability, as some do not. Such a tight limit also severely limits the extent to which TWTC could utilize CLEC wholesalers. As discussed above, this is the reason that Xspedius, with its smaller special access footprint, did not opt into these plans and instead remained largely reliant on UNEs.

C. The AT&T/BellSouth Merger Conditions Have Not Prevented AT&T from Acting in a Discriminatory Fashion

The AT&T/BellSouth merger order banned certain particularly anticompetitive provisions in special access contracts, including explicit limits on UNE purchases.[65] However, because it retains market power over special access, AT&T simply extracts its monopoly rents in other ways. Without a holistic solution that provides a lower backstop price cap rate and that eliminates all unreasonable terms and conditions, ILECs will continue to be able to discriminate through higher prices or other means.

This theory is borne out in the behavior of AT&T following the imposition of conditions in the AT&T/BellSouth merger order. **[proprietary begin] [proprietary end]**

VII. THE COMMISSION SHOULD IMMEDIATELY ADOPT REGULATIONS THAT WILL DIMINISH THE ILECS' OPPORTUNITIES TO ABUSE THEIR MARKET POWER IN THE PROVISION OF SPECIAL ACCESS

It is clear from the foregoing that the ILECs have substantial and persisting market power over TDM (DS1 and DS3), OCn and packetized (e.g., Ethernet) local transmission services and that the ILECs have exploited this market power by increasing

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[65] *See AT&T Inc. and BellSouth Corp. Application for Transfer of Control*, Memorandum Opinion and Order, 22 FCC Rcd 5662, ¶ 8 (2007) ("The AT&T/BellSouth ILECs will not include in any pricing flexibility contract or tariff filed with the Commission after the Merger Closing Date access service ratio terms which limit the extent to which customers may obtain transmission services as UNEs, rather than special access services.").

prices (both in absolute terms and relative to what are likely declining average costs) and by engaging in exclusionary pricing practices. These pricing practices represent clear violations of the bedrock Communications Act requirement under Section 201(b) that ILECs offer special access services on just and reasonable terms and conditions. It could not be more obvious that the Commission's pricing flexibility rules are a failure. The Commission must therefore immediately adopt new regulations needed to ensure that the ILECs comply with the requirements of Section 201(b).[66] Where these changes require that ILECs file new tariffs, they should do so by January 1, 2008.

First, the Commission must ensure that ILECs lower their prices to levels that are just and reasonable. This requires that the Commission take several related steps. To

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[66] *See Petition of ACS of Anchorage, Inc. Pursuant to Section 10 of the Communications Act of 1934, as amended, for Forbearance from Section 251(c)(3) and 252(d)(1) in the Anchorage Study Area*, Memorandum Opinion and Order, 22 FCC Rcd 1958, n.159 (2007) ("To the extent our predictive judgment [that ACS has market incentives to offer reasonably priced non-UNE facilities] proves incorrect, carriers can file appropriate petitions with the Commission and the Commission has the option of reconsidering this forbearance ruling. *See Federal-State Joint Board on Universal Service, Petition of TracFone Wireless, Inc. for Forbearance from 47 U.S.C. § 214(e)(1)(A) and 47 C.F.R. § 54.201(i)*, CC Docket No. 96-45, Order, 20 FCC Rcd 15095, 15099, para. 6 n.25 (2005) (conditionally granting a forbearance petition and stating that if the Commission's 'predictive judgment proves incorrect and these conditions prove to be inadequate safeguards, then parties can file appropriate petitions with the Commission and the Commission has the option of reconsidering the forbearance ruling'); *see also Broadband 271 Forbearance Order*, 19 FCC Rcd at 21509, para. 26 n.85; *Petition of SBC Communications Inc. for Forbearance from Structural Separation Requirements of Section 272 of the Communications Act of 1934, as Amended, and Request for Relief to Provide International Directory Assistance Services*, CC Docket No. 97-172, Memorandum Opinion and Order, 19 FCC Rcd 5211, 5223-24, para. 19 n.66 (2004) (stating in a forbearance decision that to the extent carriers believe, in the future, that circumstances have changed and discriminatory practices have emerged with respect to these particular routes, they are free to file petitions); *CellNet Communications, Inc. v. FCC*, 149 F.3d 429, 442 (6th Cir. 1998) (upholding the Commission's predictive judgment stating that '[i]f the FCC's predictions about the level of competition do not materialize, then it will of course need to reconsider its sunsetting provision in accordance with its continuing obligation to practice reasoned decision-making.'").

begin with, it must eliminate Phase II pricing flexibility. Price cap ILECs (the only ILECs eligible for pricing flexibility) would then be required to include all TDM, OCn and packetized special access service offerings in all geographic areas in the special access price cap basket. This is necessary because, as the Commission has often stated, price cap regulation is the most appropriate means of regulating ILEC special access rates.

In addition, given the obvious flaws in the Commission's triggers for pricing flexibility (discussed above), there is no basis for continuing to allow ILECs to file for and receive Phase I pricing flexibility pursuant to the Phase I trigger. The Commission should promptly initiate a proceeding for the purpose of revisiting under what circumstances ILECs should be permitted to enter into volume and term contracts for special access. Until the resolution of such proceeding, it would be appropriate to allow ILECs to continue to exercise the Phase I pricing flexibility in areas in which they have in the past received such flexibility, subject to the prohibitions on exclusionary pricing practices discussed below.

The Commission should also make several fundamental adjustments to the special access price cap basket designed to bring ILEC prices for special access within a zone of reasonableness. As a preliminary matter, the Commission must address the fact that placing all special access services in the same price cap basket gives the ILECs too much freedom to increase the price of one type of service in the basket that is not subject to any competition while simultaneously reducing the price of a second service in the basket that is subject to some competition. The ILECs could use this tactic to charge prices for monopoly services that are far above cost (close to or at monopoly levels). This is a real

concern because, although the ILECs have been charging prices significantly above every available measure of cost for TDM, OCn and packetized special access services, the ILECs do face varying levels of competition for these services and competition for some subset of these services could develop further in the future. It is therefore appropriate to restrict the extent to which ILECs can dramatically increase prices for the categories of special access services for which the ILEC is likely to have the greatest market power. The Commission should do so by establishing separate service categories within the basket, each of which would be subject to a prohibition on any price increases in the first two years and each of which would be subject to an upward price increase limit of five percent per year in subsequent years. Such separate service categories should be established for the following: (1) DS1 channel terminations, (2) DS1 mileage, (3) DS3 channel terminations, (4) DS3 mileage and (5) Ethernet services (including Ethernet cross-connects).

The Commission must also re-initialize the price cap index ("PCI") for the special access basket at a level that yields overall lower rates than ILECs charge today. There are of course a variety of ways in which this could be accomplished, but the most appropriate means of addressing this issue is to utilize the 6.5 percent X-Factor for the special access price cap basket that the ILECs themselves agreed to as part of the CALLS proceeding. The Commission should do so by re-initializing the special access basket PCI as if all special access services (except for Ethernet services, discussed below) were subject to price caps from the beginning of CALLS until the present and as if the 6.5 percent X-Factor continued to apply after July 1, 2004 until today. That is, the PCI should reflect application of the 3 percent X-Factor from July 1, 2000 to June 30, 2001

and of the 6.5 percent X-Factor from July 1, 2001 until revised ILEC tariffs would be filed on January 1, 2008. Moreover, the Commission should apply the 6.5 percent X-factor going forward after January 1, 2008 to the special access price cap basket as a means of continuing to reduce ILEC special access prices.

Second, the Commission should prevent ILECs from stunting the development of Ethernet competition by addressing ILECs' exorbitant prices for these services. As explained, the Commission has effectively left the ILECs to set prices for these services at any level they choose. Incremental reductions are simply insufficient to bring them within the zone of reasonableness. This can only be accomplished if the Commission mandates that ILECs reduce their prices for (1) Ethernet cross-connects by 50 percent as of January 1, 2008 and (2) Ethernet end-user circuits to equal their lowest retail prices anywhere in the BOC territory. This is by far the simplest and more reasonable way of reigning in ILEC anticompetitive Ethernet pricing practices. These price reductions would be *in lieu* of rate reductions that would apply to Ethernet under the reinitialized PCI based on application of the 6.5 X-Factor until January 1, 2008 discussed above. After January 1, 2008, price cap ILECs should be required to include Ethernet services in the special access price cap basket subject to the 6.5 percent X-Factor going forward.

It is important to emphasize that all of these measures for bringing rates for TDM, OCn and packetized (especially Ethernet) special access services closer to a zone of reasonableness are necessarily imprecise. Given the level of the ILEC prices, the proposals described herein are modest. There is virtually no chance that these reductions would yield rates that are close to the ILECs' forward-looking costs. Nevertheless, out of an abundance of caution, the Commission could allow an ILEC the opportunity to submit

rates based on a forward-looking cost study for the services at issue if the ILEC believes that the prices yielded by the reforms proposed herein would be below its forward-looking costs in any particular year. This is the approach adopted in the *CALLS Order*, and it is appropriate in this context as well. *See CALLS Order* ¶ 57.

Third, the Commission must address the possibility that rate reductions will cause special access purchasers to miss minimum volume commitments, thereby triggering penalties under existing arrangements. That is, if the generally available tariffed rates were reduced as the result of reforms in this proceeding, but the MARC was not reduced by an amount equal to the resulting reduction in spending on "eligible services," purchasers would likely miss their MARCs and be forced to pay substantial penalties. This outcome would obviously cancel out part or all of the intended benefit of reducing the absurdly high tariffed special access prices. Accordingly, the FCC reduces ILEC tariffed special access service rates, it must include the requirement that the ILECs proportionately reduce contract tariff MARCs. The amount of such reductions should be equal to the amount by which a customer's purchase of eligible services would be reduced as a consequence of the reforms in this proceeding.

The following example illustrates the manner in which this requirement would work. Assume that AT&T's contract with customer A provides that customer A purchase $10 million of eligible services from AT&T between January 1, 2008 and December 31, 2008 in order for customer A to qualify for the volume/term discount. Assume also that customer A is on course by the end of the year to purchase $2 million in eligible, non-special access services and $8 million in eligible special access services, the price of which will be reduced by 25 by rate reductions. If rate reductions of 25 percent were to

go into effect on January 1, 2008, customer A would miss its $10 million MARC by $2 million (25 percent of $8 million). To avoid this outcome, AT&T would be required to set the MARC at $8 million for 2008 *and* reduce the MARC for the following year by $2 million.[67]

Fourth, the Commission must limit ILECs' opportunities to engage in exclusionary pricing practices. As explained, these practices allow the ILECs to retain their market power in the provision of special access services. Allowing the ILECs to continue to engage in exclusionary pricing practices makes it far less likely that competition will replace regulation in some or all special access markets in the future.

Accordingly, the Commission should prohibit ILECs from conditioning the availability of any discount off of standard tariffed pricing for any kind of special access (TDM, OCn or packetized) on a commitment that is not reasonably related to the efficiencies yielded by the volume or term commitment that is at issue. The phrase "standard tariffed pricing" as used herein means any month-to-month or standard tariffed term or volume discount offer for special access services of any kind offered by the ILEC. A condition is "reasonably related to the efficiencies yielded by the volume or term commitment that is at issue" if (1) the ILEC can show that a purchaser's agreement to the condition directly and quantifiably results in a reduction in the costs of providing the special access services that are the subject of the increased discount, and (2) the discount offered in return for the purchaser's commitment to meet the condition causes the ILEC to pass through to the purchaser at least 75 percent of its reduced costs.

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[67] This scenario would be relevant to a customer that decides not to take advantage of the fresh look option discussed below.

It is also important that the Commission provide a non-exclusive list of the types of conditions that would be *per se* unlawful under this regulation. That list should include, for example, any condition on the availability of a discount that (1) restricts the extent to which a special access purchaser may purchase UNEs; (2) increases or has the effect of increasing the volume commitment over the life of the offering or agreement without also increasing the discount proportionately; (3) restricts the extent to which a special access purchaser may purchase from non-ILEC wholesalers; (4) ties or has the effect of tying special access discounts to the purchase of non-special access services (e.g., long distance) from the ILEC; (5) imposes a penalty for failure to meet a volume commitment that is greater than the difference between the prices applicable under the customer's existing volume/term agreement and those applicable under the most-favorable volume/term discount offering of the same ILEC for which the customer qualifies; or (6) imposes an early termination penalty that is greater than the difference between the amount the purchaser has paid to the ILEC as of the termination date and the amount the purchaser would have paid under the most favorable volume/term discount offering of the same ILEC for which the customer qualifies as of the termination date.

Fifth, in order to allow purchasers and competitive wholesale providers of special access to take advantage of the new terms mandated by these reforms, the Commission should mandate that the ILECs grant all customers subject to existing special access contracts or volume/term commitments a "fresh look" right (one such election right per arrangement) to terminate any existing special access purchasing arrangement without the application of an early termination penalty within one year of the effective date of this rule. Absent this requirement, special access purchasers who are tied up in multi-year

term commitments could well be forced to continue to pay unreasonable prices or abide by unreasonable terms and conditions for years after the adoption of the reforms described herein.

This comprehensive set of reforms will address the most egregious problems created by the overly permissive regime applicable to ILEC special access today. The Commission can of course examine the effects of competition on ILEC special access pricing in the future to determine whether it is appropriate to re-assess this regulatory regime as appropriate.

VIII. Conclusion

For the forgoing reasons, the FCC should adopt the recommendations herein.

Respectfully submitted,

/s/

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ATTORNEYS FOR TIME WARNER TELECOM AND ONE COMMUNICATIONS

August 8, 2007

Appendix A

Appendix A contains the Declaration and Reply Declarations of Graham Taylor originally filed in the AT&T/BellSouth merger proceeding. Mr. Taylor's Reply Declaration contains the proprietary information of AT&T and TWTC subject to the protective order in WC Docket No. 06-74.

While TWTC can submit its own confidential information contained in the Taylor Declaration in this proceeding, it has maintained the confidentiality of the proprietary information of AT&T in the declaration, which is redacted in both the confidential and public versions of the instant filing.

REDACTED – FOR PUBLIC INSPECTION.

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C.

In the Matter of	)	
	)	
AT&T Inc. and BellSouth Corporation Applications for Approval of Transfer Of Control	)	WC Docket No. 06-74

DECLARATION OF GRAHAM TAYLOR ON BEHALF OF TIME WARNER TELECOM, INC.

I. INTRODUCTION

1. My name is Graham Taylor. My business address is 10475 Park Meadows Drive, Littleton, CO 80124.

2. I am Senior Vice President for Marketing at Time Warner Telecom ("TWTC"). I have over 25 years of telecommunications industry experience in marketing, sales, corporate development, management and operations. I spent 15 years specifically in the local network services competitive environment with TCG, AT&T Local, LOGIX Communications and TWTC. I was responsible for the planning, construction and implementation of many of TCG's networks and markets.

3. The purpose of this declaration is to (1) describe TWTC's business and network generally; (2) describe some of the products that TWTC offers to its customers, particularly TWTC's Ethernet Services, Ethernet Internet Access and Internet Protocol ("IP") Virtual Private Network ("VPN") Solutions, and how those products create value for TWTC's customers; (3) explain how easily ILECs could (if not constrained by regulation) engage in anticompetitive practices that would impede TWTC's ability to deliver these services to its customers; (4) describe some of the experiences that TWTC

has had with the ILECs to date; and (5) describe TWTC's experience in attempting to interconnect with AT&T's Internet backbone.

II. TWTC'S BUSINESS AND NETWORK

4. TWTC was established in 1993. It is a leading provider of managed voice and data networking solutions for business customers, carriers, and Internet service providers ("ISPs") in 22 states and 44 metropolitan areas around the country. TWTC is collocated in **[proprietary begin] [proprietary end]** around the country and has installed **[proprietary begin] [proprietary end]**. TWTC has invested over $2.5 billion in its network and has deployed nearly 21,000 route miles of fiber, of which over 13,000 route miles have been deployed in local metro networks.

5. It is in TWTC's interest to build its own facilities whenever possible. When TWTC provides service over its own facilities, it is able to control the service end-to-end and provide a more reliable customer experience. TWTC also possesses greater flexibility to design innovative new offerings when providing service over its own facilities, because, in such cases, it is not constrained by another carrier's choice of technology or network design.

6. Unfortunately, there are many locations where TWTC is unable to achieve the revenue and return on investment required to deploy its own loop facilities. For example, TWTC serves approximately **[proprietary begin] [proprietary end]** of its broadband lines (*i.e.*, lines that carry more than 200 Kpbs in both directions) over its own loops. Where TWTC has not built its own loops, it must rely on incumbent LEC loops (generally special access services). This is because the incumbent LEC usually owns the only loop facility serving locations to which TWTC cannot efficiently deploy its own

loops. Competitive providers usually have not deployed loop facilities serving such locations.

III. TWTC'S ETHERNET SERVICES, ETHERNET INTERNET ACCESS AND IP VPN SOLUTIONS

7. TWTC offers one of the most comprehensive suites of data solutions to retail business customers and carriers on the market today. Our solutions allow retail customers to create their own internal voice and data networks with Internet access through TWTC to Internet users on other external networks. Two of TWTC's most promising IP-based solutions are Ethernet Services and IP VPN Solutions. The demand for these services has been growing. For example, TWTC's Ethernet business has been growing at a rate of over 30 percent per year.

8. TWTC's Ethernet Internet Services deliver connectivity between customer locations and Internet access over a fully duplex Ethernet connection. The generic term "Ethernet" refers to a set of networking technologies and protocols that allow multiple devices to be connected to a single network via multiple points of access and to communicate with each other effectively and reliably. These protocols have been standardized as the Institute of Electrical and Electronics Engineers' ("IEEE") standard 802.3. The IEEE 802.3 standard essentially defines the language that devices connected to the network speak. In addition, Ethernet uses a scheme called carrier sense multiple access with collision detection ("CSMA/CD"). This scheme defines the manner in which devices connected to the network will act when they detect that there is other traffic traversing the network, or when they detect that data traversing the network has "collided" with other data.

9. Since its invention in the early 1970s, Ethernet has proven itself to be a flexible, scalable and reliable networking technology. As Ethernet became the Local Area Network ("LAN") protocol-of-choice in the 1990s, innovation in the area of Ethernet-related technologies led to better devices that could communicate faster, more reliably, and over longer distances. Today, TWTC offers its customers four types of Ethernet solutions: Ethernet over SONET transparent LAN, Switched Ethernet transparent LAN, Extended Native LAN Ethernet for wide-area solutions and Ethernet Internet Access which gives users fractional, full or burstable solutions from 2 Mbps to 1000 Mbps (1 Gbps). Wherever possible, TWTC customers connect directly using TWTC's own local fiber transmission facilities to TWTC's national IP backbone.

10. These services provide TWTC's customers with the ability to cost-effectively connect between their network locations and to the Internet using a familiar technology. Using the protocol that is native to most LANs around the country allows the customers to save on equipment costs and ensures a smoother "handing-off" of the data from their LAN to the service provider. Further, this solution is scalable and can easily expand to meet growing bandwidth requirements without the need to purchase new equipment. For example, TWTC's Ethernet product allows customers to achieve speeds anywhere from 2 Mbps to 100 Mbps with the same piece of equipment. Using traditional TDM-based special access services such as DS1s, DS3s, etc., a customer who wants to achieve higher levels of speed would need to change equipment to achieve that higher speed.

11. Another example of the value delivered by the TWTC switched Ethernet offering to customers involves the concept of oversubscription. As with the Public

Switched Telephone Network ("PSTN"), a switched Ethernet connection is capable of serving more subscribers than can use it at any one time. Compared to point-to-point private line networks, which require a directly proportional relationship between the number of connections and network capacity, an Ethernet network is designed with the assumption that not everybody who is connected to the network will be using the network, allowing the customer to purchase connectivity at a better value.

12. Ethernet also benefits our customers from a technological perspective. For example, the wide-area multipoint configuration that TWTC uses for our Ethernet is more efficient than using multiple point-to-point connections, because the Ethernet protocol used by TWTC dynamically routes data on the network based on capacity, allocation and usage. Essentially, the network can sense when there is congestion and route the data appropriately so that it reaches its destination more quickly. This dynamic routing and bandwidth allocation is not possible using multiple point-to-point connections.

13. TWTC has been offering the IP VPN Solution for about six months. Generally speaking, a VPN allows remote locations or users to connect via different access methods. The VPN network uses protocols that encrypt and encapsulate the data to ensure privacy and integrity. These "tunneling" protocols effectively simulate a point-to-point connection. There are various protocols that are used to accomplish this "tunneling," including the Point-to-Point Tunneling Protocol championed by Microsoft and the Layer 2 Tunneling Protocol adopted as a standard by the Internet Engineering Task Force. TWTC uses Multiprotocol Label Switching ("MPLS"), because it allows our

customers to maintain their existing network protocols while ensuring the privacy and reliability of the data they send over TWTC's network.

14. The benefits of VPN solutions for customers are fairly straightforward. Many of the same scalability and flexibility benefits offered by Ethernet are also offered by VPN, because both solutions use many of the same underlying technologies, such as MPLS. Furthermore, IP VPN Solutions allow our customers "any-to-any" connectivity to locations across the U.S. with the same level of privacy and efficiency that a point-to-point network connection would deliver. Without VPN, customers who want secure, private connections would be required to purchase point-to-point connections to link up their various sites. This is costly, time-consuming and inefficient, especially if a customer has more than two locations to connect to the network. A VPN allows the customer to use existing access methods and infrastructure that is already built-out and still achieve the same levels of security and privacy. This is a much more efficient scheme, and much more scalable and cost-effective than services such as ATM and Frame Relay that IP VPN is rapidly replacing.

15. TWTC's Ethernet Services and IP VPN Solutions also allow TWTC to provide our customers with a variety of class of service commitments and applications that allow for even more efficient use of network capacity. For example, customers who choose the IP VPN Solution can prioritize the different types of data that will traverse the network. This is important for applications that are sensitive to latency (*i.e.*, the time it takes from the data to travel from its origin to its destination) in the network.

16. For example, customers increasingly use Ethernet and VPN solutions to transmit intra-company IP voice among a company's different locations. IP voice

applications offer customers lower costs, greater flexibility and increased customer control of service features. However, voice applications are very latency-sensitive, and, as such, voice IP traffic must be prioritized accordingly.

17. TWTC has incurred substantial fixed costs (*i.e.*, costs that are constant regardless of the actual number of customers served) in the process of developing the capability to deliver these products to our customers. These are incremental costs associated exclusively with providing IP services, and they pre-suppose an enormous infrastructure investment in network facilities, back office systems development and capability and personnel before TWTC can take advantage of the incremental opportunity to offer IP-based services. The incremental fixed costs of IP include, for example, substantial sums to purchase new equipment and software to support back office functionalities such as billing and collection related to both our Ethernet and VPN solutions. TWTC also incurred substantial costs to install the equipment and software and to train personnel to use them. As with all fixed costs, having more customers allows TWTC to spread these costs out and lower average per-customer costs.

18. In addition, in deploying Ethernet, VPN and VoIP, TWTC has incurred fixed costs in a geographic area that increase when TWTC expands its service territory to a new geographic area. These costs are substantial even where TWTC does not extend its fiber network to serve the area in question. Costs associated with extending network coverage even without fiber deployment include the costs TWTC incurs to purchase Ethernet multiplexers and switches and soft switches, to acquire and to prepare central office spaces for those facilities, and to install the equipment.

IV. WITHOUT COOPERATION FROM ILECS TWTC WILL BE UNABLE TO DELIVER THESE SOLUTIONS TO ITS CUSTOMERS.

19. The ILECs can impede TWTC's ability to deliver its products to customers in one of two ways: (1) by refusing TWTC access to the ILEC local transmission facilities on just, reasonable and non-discriminatory terms and conditions; and (2) by refusing to treat the traffic that TWTC hands off to the ILEC network with the same prioritization and level of service quality that TWTC gives to the traffic.

20. If an ILEC were to discriminate against TWTC in this manner and prevent TWTC from expanding its customer base or geographic coverage, competition in the business market would be significantly harmed. This is especially significant given customers' increasingly common demand that, as discussed below, their service provider serve more (or all) of their locations. To illustrate the extent of such consequences, TWTC has determined the total number of locations that its customers have throughout the country (hereinafter referred to as "Customer Locations"). Most of TWTC's customers have multiple locations. In fact, TWTC customers have on average **[proprietary begin] [proprietary end]** locations within the U.S. Customer Locations, as used herein, refers to the total number of locations of TWTC's customers, both those that TWTC serves and those that TWTC does not serve.

21. Of the total TWTC Customer Locations in the U.S., **[proprietary begin] [proprietary end]** percent are located in the AT&T ILEC territory and **[proprietary begin] [proprietary end]** percent are located in the BellSouth territory. In markets in which TWTC has deployed fiber transport facilities (hereinafter referred to as "TWTC Markets") in the AT&T ILEC territory and BellSouth territory, there are **[proprietary begin] [proprietary end]** Customer Locations respectively. Within the non-TWTC

Markets in the AT&T ILEC territory and BellSouth territory, there are **[proprietary begin] [proprietary end]** respectively. These Customer Locations totals are slightly overstated, because they include portions of markets in the AT&T and BellSouth regions that are served by other ILECs. Finally, TWTC currently serves Customer Locations of the same customer in both the BellSouth territory and the AT&T ILEC territory for approximately **[proprietary begin] [proprietary end]** customers. These **[proprietary begin] [proprietary end]** customers account for approximately **[proprietary begin] [proprietary end]** percent of TWTC's billed charges in the BellSouth and AT&T ILEC regions.

22. Currently, **[proprietary begin] [proprietary end]**

23. **[proprietary begin] [proprietary end]**

24. Given that, as explained, TWTC cannot construct its own loops to serve many Customer Locations, TWTC needs to rely on ILEC inputs to serve a very large number of Customer Locations that it currently does not serve with its own facilities. Indeed, TWTC would need to rely exclusively on ILEC local transmission facilities to serve customers in non-TWTC Markets.

25. Moreover, it is becoming increasingly important that TWTC serve a higher percentage of its Customer Locations than it has in the past. In the past, it was possible for TWTC to provide a service to a subset of a customer's locations and the customer would then integrate the TWTC service with services offered by other carriers. However, customers increasingly demand that carriers perform this network integration function and that carriers provide all of the services that a business customer needs to all of the customer's locations. For example, whereas in the past a business customer might

have purchased Ethernet from TWTC at three locations and voice service from another carrier at those three locations as well three other locations to which Ethernet was not essential, that same business customer is likely today to insist that its carrier provide an integrated IP voice and data solution to all six of its locations. As discussed, to reach all of a customer's locations to provide services in this manner, TWTC is increasingly dependent on purchasing local transmission facilities to locations to which TWTC could not deploy its own loops.

26. TWTC can only efficiently integrate its network with the ILEC's network if it can obtain access to the appropriate loop and transport facilities. For Ethernet, this means that TWTC must obtain access to Ethernet transmission facilities from the ILEC. If TWTC must rely on DS1 or DS3 local transmission facilities, it would incur extra costs of equipment and encounter service degradation, as discussed above.

27. Often, with Ethernet and VPN services, connecting the ILEC's local data facilities with TWTC's local data facilities should involve a straightforward connection between a TWTC Ethernet switch or IP router (in the case of VPN) and the connection to the ILEC's switch or IP router. Network connectivity can be established in this simple fashion, because many of the protocols and technologies supporting these services have become so widely adopted and standardized that even pieces of equipment from different vendors usually have little trouble interfacing and communicating with each other.

28. TWTC's customers often require that their telecommunications carrier handle and prioritize different types of traffic. Most carriers manage their networks by prioritizing the traffic that traverses their networks. Typically, voice and video traffic are considered highest priority and are guaranteed to be delivered in a certain amount of time

(usually milliseconds). Internet traffic, which does not necessarily travel exclusively on a single carrier's network, is usually given "best efforts" level of service. However, because of the increasing importance of Internet traffic in terms of the applications, such as voice, that are now carried via the Internet, "best efforts" are inadequate in many cases.

29. As detailed above, TWTC's Ethernet and VPN services are designed so that TWTC can offer its customers quality of service and class of service commitments that ensure a customer's latency-sensitive data will be prioritized and delivered in a timely manner. However, since TWTC traffic must traverse ILEC network facilities, TWTC needs to negotiate agreements whereby the traffic that TWTC hands off to the ILEC networks will be treated with the same prioritization and class of service with which the data was treated while on TWTC's network.

30. For example, when TWTC must rely on ILEC local transmission facilities to reach customer locations to which TWTC cannot efficiently deploy its own facilities, TWTC must work with the ILEC to gain class of service and appropriate prioritization of packets as they traverse the ILEC's facilities. An ILEC that refuses to ensure that traffic handed off from TWTC's network to the ILEC's network is treated in accordance with these requirements would preclude TWTC from delivering the quality of Ethernet and VPN services to end users that they increasingly demand. If the ILEC were at the same time to treat traffic that stays entirely on its own network in accordance with appropriate class of service and prioritization, the ILEC, given its ubiquitous network reach, would have a significant competitive advantage over TWTC.

V. TWTC HAS EXPERIENCED SUBSTANTIAL DIFFERENCES AMONG ILECS IN SEEKING TO OBTAIN NETWORK ACCESS AND APPROPRIATE TREATMENT OF TRAFFIC ORIGINATING ON TWTC'S NETWORK.

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41. **[proprietary end]**

42. Finally, **[proprietary begin] [proprietary end]**

43. In light of AT&T's anticompetitive pricing and practices, TWTC has relied exclusively on its own facilities and, where necessary, DS1 and DS3 AT&T ILEC loops with TWTC-provided Ethernet equipment to compete in the provision of Ethernet in the AT&T ILEC territory. As explained, however, reliance on AT&T DS1 and DS3 loops is not a viable long term strategy because those facilities impose costs and inefficiencies on TWTC. The combination of AT&T's anticompetitive Ethernet pricing and practices and the increasing obsolescence of TDM facilities threatens to drive competitive providers of Ethernet like TWTC out of the market.

VI. TWTC'S EXPERIENCE IN ATTEMPTING TO EXCHANGE TRAFFIC WITH AT&T'S INTERNET BACKBONE RAISES CONCERNS WITH REGARD TO THE PROPOSED MERGER WITH BELLSOUTH

44. In order to provide Internet access service to its end user business customers and to its wholesale ISP customers, TWTC must connect its Internet backbone with other Internet backbones. **[proprietary begin]**

45. **[proprietary end]**

VII. CONCLUSION

46. The proposed merger between AT&T and BellSouth comes at a time when changes in the marketplace are making TWTC reliant on ILEC loops, transport and wholesale data services in more locations, and making TWTC purchase more Internet backbone connectivity from Tier 1 backbones like AT&T's. Changes in the marketplace are also making it necessary that TWTC purchase different types of loop and transport inputs from ILECs than it has purchased in the past, because these requirements provide ILECs new opportunities to discriminate. For example, TWTC must now purchase Ethernet loops and transport as well as obtain class of service and quality of service commitments from ILECs. In my experience, regulation has not constrained ILECs from raising TWTC's costs by overpricing, denying, delaying, and degrading the wholesale inputs TWTC needs in order to compete.

47. TWTC has experienced this conduct with both BellSouth and AT&T, but AT&T has been even more willing to engage in this conduct than BellSouth. In fact, AT&T has effectively prevented TWTC from providing service to customer locations over AT&T Ethernet loops anywhere in the AT&T ILEC territory. If the AT&T conduct were to spread to the BellSouth territory after the merger, TWTC would have even less

chance than it has already of offering competitive Ethernet service to businesses in the BellSouth region.

SIGNATURE PAGE

I declare under penalty of perjury that the foregoing is true and correct, to the best of my knowledge and belief.

Graham A. Taylor

Executed on June 5, 2006

REDACTED-FOR PUBLIC INSPECTION

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
	)	
AT&T Inc. and Bell South Corporation	)	WC Docket No. 06-74
Applications for Approval of	)	
Transfer of Control	)	

REPLY DECLARATION OF GRAHAM TAYLOR
ON BEHALF OF TIME WARNER TELECOM, INC.

I. INTRODUCTION

1. My name is Graham Taylor. My business address is 10475 Park Meadows Drive, Littleton, CO 80124.

2. I am Senior Vice President for Marketing at Time Warner Telecom, Inc. ("TWTC"). I have over 25 years of telecommunications industry experience in marketing, sales, corporate development, management and operations. I spent 15 years specifically in the local network services competitive environment with TCG, AT&T Local, LOGIX Communications and TWTC. I was responsible for the planning, construction and implementation of many of TCG's networks and markets.

3. The purpose of this declaration is to (1) respond to the reply declaration of Parley C. Casto[1] generally; (2) describe how TWTC can only serve Ethernet customers at retail in AT&T's ILEC region if it is able to obtain finished Ethernet services at just and reasonable rates,

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[1] *See* Reply Declaration of Parley C. Casto, attached to AT&T, Inc. and BellSouth Corporation Opposition to Petitions to Deny and Reply to Comments, WC Dkt. No. 06-74 (filed June 20, 2006) ("*Casto Declaration*").

terms and conditions; and (3) describe why TWTC cannot rely on TDM loops purchased from AT&T along with TWTC-supplied TDM electronics to provide Ethernet Services.

II. TWTC's BUSINESS AND NETWORK

4. TWTC was established in 1993. It is a leading provider of managed voice and data networking solutions for business customers, carriers, and Internet service providers ("ISPs") in 22 states and 44 metropolitan areas around the country. TWTC provides these services over its own loop and transport transmission facilities wherever possible. However, there are many locations where TWTC is unable to achieve the revenue and return on investment required to deploy its own loop and transport transmission facilities. For example, TWTC serves only 26.8 percent of its customer buildings using its own facilities, while it must rely on other carriers 73.2 percent of the time.[2] Where TWTC cannot built its own transmission facilities in the BellSouth and AT&T ILEC territories, TWTC must rely almost completely on BellSouth's and AT&T's loops and transport (generally special access services). This is because, in the vast majority of the commercial buildings to which TWTC cannot deploy and has not deployed its own loops in the BellSouth and AT&T ILEC territories, BellSouth and AT&T have respectively deployed their own loops. In fact in TWTC's experience, BellSouth and AT&T own the *only* loops serving most of these commercial buildings in their respective territories.

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[2] *See* Time Warner Telecom, Inc., SEC Form 10-Q Quarterly Report for the Period Ended Mar. 31, 2006, at 224 (filed May 10, 2006).

III. RESPONSE TO PARLY CASTO'S ALLEGATIONS

5. Mr. Casto makes five general arguments in response to my initial declaration.[3]

[AT&T proprietary begin]

6.

[AT&T Proprietary end] AT&T has been selling OPT-E-MAN since at least 2003 as a tariffed product to both wholesale and retail customers. Moreover, TWTC has been selling its similar product at wholesale since 2004. In that time, TWTC has had no problem fashioning numerous wholesale contracts for its services, including a contract in which TWTC provides Ethernet at wholesale to AT&T. **[AT&T proprietary begin]**

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[3] *See* Declaration of Graham Taylor, attached to Petition to Deny of Time Warner Telecom, WC Dkt. No. 06-74 (filed June 5, 2006) ("Taylor Declaration").

7.

See Casto Declaration¶ 28.

[AT&T proprietary end]

Notwithstanding TWTC's strong interest in identifying and relying upon wholesale providers of finished Ethernet other than AT&T and other ILECs, TWTC has purchased or is in the process of purchasing **[proprietary begin] [proprietary end]** finished Ethernet loops at wholesale from non-ILEC wholesalers. Given that TWTC currently serves **[proprietary begin] [proprietary end]** customer locations with Ethernet services (both on-net and off-net), these **[proprietary begin] [proprietary end]** loops account for **[proprietary begin] [proprietary end]** percent of the Ethernet loops TWTC needs to compete. There are **a** limited number of locations in the AT&T region in which non-ILEC wholesalers offer Ethernet service, and in which TWTC has not purchased Ethernet from these non-ILECs. **[proprietary begin] [proprietary end]**

8. It is important to emphasize, however, that in those few places where non- ILECs offer finished Ethernet loops at wholesale, **[proprietary begin] [proprietary end]**

9. Mr. Casto also argues that because "AT&T has sold very little [sic] OPT-E- MAN services to unaffiliated carrier customers.. .it shows that the retail market for Ethernet services has developed and is highly competitive even without the availability of OPT-E-MAN as an input." *Casto Declaration* ¶ 18. *Mr.* Casto's reasoning is exactly backwards. TWTC and other carriers have not purchased OPT-E-MAN under AT&T's federal tariff because AT&T's high tariffed prices **[proprietary begin] [proprietary end]** prevent carriers from competing in the downstream Ethernet retail service market. To the extent that TWTC has been able to deploy

Ethernet services at retail in AT&T's region, it has done so using 1) its on-net facilities; 2) TDM loops purchased from AT&T; and 3) an extremely limited number of competitive facilities. As TWTC has only deployed loops to approximately 27 percent of the buildings in which its customers are located, it must rely upon AT&T TDM facilities, which, as I discuss below, are becoming increasingly unviable as a wholesale input for retail Ethernet. As a consequence, TWTC has only been able to serve a small subset of the market that it could otherwise reach if it could obtain finished Ethernet services from AT&T on reasonable terms and conditions.

10. **[AT&T proprietary begin]**

See Casto Declaration

[AT&T proprietary end] [proprietary begin]

11.

12.

13.

14.

15. **[proprietary end]**

17. Mr. Casto argues that, even if AT&T's wholesale prices for finished Ethernet are too high to allow TWTC to compete, TWTC can simply purchase AT&T's TDM special access under its 2005 agreement with AT&T and TWTC can supply its own Ethernet electronics. *See Casto Declaration* ¶¶ 19-22. For this reason, Mr. Casto argues that AT&T's finished Ethernet

loops are not a necessary input for TWTC's Ethernet services. As I explained in my initial declaration, TWTC does in fact purchase some TDM circuits from AT&T to provide Ethernet services at retail. *See Taylor Declaration* ¶43. However, in many situations, Ethernet over AT&T-provided TDM circuits is not a viable option to serve the customer because of the additional costs and inefficiencies involved. I explain these costs and inefficiencies below.

18. *First*, as I explained in my initial declaration, Ethernet over TDM requires the purchase of additional, unneeded electronics. See Taylor Declaration ¶¶ 26,43. When TWTC (or any other CLEC) purchases a TDM loop, that circuit comes with TDM electronics. Although TWTC does not pay a separate charge for these TDM electronics, the fixed cost of these electronics is surely incorporated into the monthly recurring charge for the circuit.[4] TWTC must then place Ethernet customer premises electronics (the "Overture" box) on top of the existing TDM electronics to enable TWTC to offer Ethernet service. The Overture solution adds an additional **[proprietary begin] [proprietary end]** in cost per circuit depending upon the configuration and capacity of the circuit. TWTC is therefore essentially paying "double" for the electronics to provide Ethernet over TDM: once for the TDM electronics and once for the Overture equipment to convert the TDM signal to Ethernet.[5]

19. *Second,* in order for TWTC to provide Ethernet over TDM in areas that are not close to the AT&T/TWTC point of interconnection ("the POI") (which is usually located in a

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[4] As Mr. Casto correctly explains with respect to the cost of Ethernet electronics, when a wholesaler provides finished Ethernet service "it is the wholesale Ethernet provider that purchases and deploys Ethernet electronics, the costs of which are then included in the overall rate for the finished Ethernet access service." *Casto Declaration ¶21. The same is true of TDM services.*

[5] Mr. Casto asserts that, in my discussion of TDM loops as inputs to Ethernet service, I observed that TWTC must purchase Ethernet electronics when in fact, Mr. Casto asserts all carriers seeking to provide Ethernet service must purchase such electronics. *See id.* But the point is not that TWTC must purchase Ethernet electronics when relying on TDM loops, but that TWTC must purchase *TDM electronics in addition* to Ethernet electronics.

large AT&T central office in a downtown area) TWTC must not only pay for the TDM loop, but also pay substantial mileage charges for transport from the local serving office ("LSO") in the distant area to the AT&T/TWTC POI. As offered by AT&T under both its month-to-month tariff and its volume discount offers, the transport circuit has both a fixed capacity charge and a substantial variable mileage charge component.[6] **[proprietary begin] [proprietary end]**

20. Ethernet over TDM also increases TWTC's costs because TWTC must purchase much more TDM capacity than it needs to provide the Ethernet service. For example, a DS3 provides approximately 45 Mbps of bandwidth. If a customer demands a 50 Mbps Ethernet loop (a level of service offered by both AT&T and TWTC), TWTC must purchase two DS3s from AT&T. Because of bandwidth loss that occurs when TDM is converted into Ethernet, the customer does not receive 90 Mbps of bandwidth. Rather, assuming a 512 kbps frame (essentially a packet) size, two DS3s only provide 66.5 Mbps of Ethernet bandwidth. Indeed, using Ethernet over TDM results in between a 4 to 30 percent bandwidth loss from the TDM circuit. Under TWTC's pricing flexibility contract with AT&T, two DS3s of capacity costs TWTC $1,674.12 assuming no interoffice mileage. If there were five interoffice miles, two DS3s would cost an astronomical $3,024.12 per month ($1,674.12 + $900 (fixed interoffice charge) + ($90 x 5) (interoffice mileage charge)). **[proprietary begin] [proprietary end]**

21. If a customer demands a 100 Mbps Ethernet circuit, TWTC must purchase an OC-3 circuit (155.52 Mbps) which will only provide 146 Mbps per second of actual throroughput given a 5 12 kbps frame. This is because three DS3s are generally not suitable to provision a 100 Mbps Ethernet circuit since, assuming a 5 12 kbps frame, three DS3s actually provides less than 100 Mbps of Ethernet bandwidth. An OC-3 circuit under the current AT&T/TWTC discount

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[6] *See* SBWT FCC Tariff No. 73 § 7.3.10 (for DS1s); *id.* § 39.5.2 (for DS3s).

contract costs $1670 assuming no interoffice mileage. If there were five interoffice miles, an OC-3 would cost $3,656 ($1670 + $886 (fixed interoffice charge) + ($220 x 5) (interoffice mileage charge)). **[proprietary begin] [proprietary end]**

22. The inefficiencies are highest at the lowest (10 Mbps) Ethernet capacity. A single 45 Mbps DS3 circuit costs $836.06 per month under the AT&T/TWTC contract assuming no interoffice mileage. If there were five interoffice miles, the cost would be $1512 per month ($837 + $450 (fixed interoffice charge) + ($45 x 5) (interoffice mileage charge)) under AT&T's contract tariff. **[proprietary begin]**

23. **[proprietary end]**

24. *Fourth,* reliance on TDM loops introduces additional points of potential failure into the circuit. Moreover, identifying the source of service problems is slower, more complex and likely more costly when TWTC must rely on two sets of equipment rather than one. If there is a problem with service quality and a circuit provisioned with both TDM and Ethernet electronics goes down, TWTC must send its technicians to the site and AT&T must also send its technicians to the site to determine whether the failure was caused by TWTC's equipment, AT&T's equipment, AT&T's circuit, or some combination of these. Because these locations are often far from the areas where TWTC has built a substantial portion of its network facilities, maintenance calls can take several hours, adding substantial cost and delay to restoring the customer's service. Indeed, unlike AT&T, TWTC only has a handful of technicians in each metropolitan area that it serves, and trouble on multiple distant circuits forces TWTC to hire more technicians. By contrast, if TWTC purchases a finished Ethernet loop, as Mr. Casto explains, only AT&T has the responsibility for visiting the customer site if the service goes down. *See Casto Declaration* ¶ 12. In addition, where TWTC self-deploys its own Ethernet

loops, service repair and maintenance truck-rolls are generally much less costly in terms of labor and time because TWTC can only deploy loop facilities close to its existing network, decreasing the distance that must be traveled by the techs and increasing their utilization.

25. As a result of these additional costs and inefficiencies, TWTC can only serve a small subset of the market when relying on TDM transmission inputs than it could otherwise serve if it could obtain finished Ethernet loops on reasonable terms and conditions. **[proprietary begin] [proprietary end]**

26. Mr. Casto also misconstrues or is non-responsive to several of the points I made in my initial declaration. **[proprietary begin] [proprietary end] [AT&T proprietary begin]**

See Casto Declaration ¶ 33.

[AT&T proprietary end] [proprietary begin] [proprietary end] [AT&T proprietary begin]

27.

See Casto Declaration ¶ 35. **[AT&T proprietary end] [proprietary begin] [proprietary end]**

28. Mr. Casto points to a joint TWTC/SBC press release in an attempt to show that TWTC willingly and gladly signed their 2005 special access agreement. He notes that TWTC stated at the time that the contract "strengthens Time Warner Telecom's ability to compete

effectively for the nationwide business market." *Casto Declaration.* ¶ 42 & n.3 1. It is true that TWTC was able to provide services to more locations under that discount plan than under the extremely high rates that TWTC was forced to buy previously. But this is an obvious point. **[proprietary begin] [proprietary end]**

29. Mr. Casto is correct that signing the contract was better than not signing the contract, but this says little about whether the terns of that contract are just and reasonable or sufficient to allow TWTC to expand the scope of its service offerings. **[AT&T proprietary begin]**

See id ¶ 43.

[AT&T proprietary end] Because of the absence of alternatives to AT&T's ubiquitous network, TWTC has had to agree to unreasonable terms and conditions in order to obtain prices that permit TWTC to use AT&T's facilities in limited cases.

30. **[proprietary begin] [proprietary end] [AT&T proprietary begin]**

31.

Casto Declaration

36

(id.)

[AT&T proprietary end] [proprietary begin]

32.

33. **[proprietary end]**

34. TWTC also has obtained substantial anecdotal evidence that AT&T is able to undercut TWTC's Ethernet rates even further because it sometimes offers its retail customers the *intrastate* rate for its Ethernet services. Because many states have largely deregulated their special access services, TWTC in many cases has neither the right to obtain these prices nor does it know what these prices are. However, anecdotal evidence indicates that AT&T's intrastate rates are, in many cases, substantially below their interstate rates.

35. **[AT&T proprietary begin]**

See Casto Declaration ¶40.

36. **[AT&T proprietary end] [proprietary begin] proprietary end] [AT&T proprietary begin]**

37.

See Casto Declaration ¶39.

[AT&T proprietary end] [proprietary begin]

[proprietary end]

38. As I explained in my initial declaration, because TWTC *must rely on* ILEC local transmission facilities to reach customer locations to which TWTC cannot efficiently deploy its own facilities, TWTC must work with the ILEC to gain class of service and appropriate prioritization of IP packets as they traverse the ILEC's facilities. Otherwise TWTC cannot provide IP VPN service to customers served by AT&T's facilities. *See id.* ¶¶ 29-30.

[proprietary begin] [proprietary end]

39. **[AT&T proprietary begin]**

Casto Declaration ¶38.

[AT&T proprietary end] [proprietary begin] [proprietary end]

40. **[AT&T proprietary begin]**

[AT&T proprietary end] [proprietary begin] [proprietary end]

REDACTED-FOR PUBLIC INSPECTION

I hereby declare under penalty of perjury that the foregoing is true and accurate to the best of my knowledge and belief.

Executed on July 25, 2006

Graham Taylor

Appendix B

[redacted for public inspection]

Appendix C

TWTC and One Communications subscribe to a number of Standard special access pricing plans offered by the ILECs. As discussed in the comments, there are three types of discount plans offered by the ILECs: (1) "Term" discount plans that require no monetary or circuit commitment, but generally offer the smallest discount and often lack key benefits such as circuit portability; (2) "Standard" discounts that are available to any qualifying purchaser, that generally require a circuit commitment level, and that apply to rates charged in both Phase II and price cap MSAs and (3) "Overlay" contract tariffs that are individually negotiated with a particular purchaser and then filed publicly. The following are summaries of the Term, Standard and Overlay plans under which either TWTC or One Communications (or in some cases both) purchases special access services from the ILECs. These plans are representative of the ILEC plans under which the two companies purchase the vast majority of service access services from ILECs. As the summaries make clear, the discount plans to which TWTC and One Communications subscribe bear all of the characteristics of exclusionary pricing.

Ameritech Tariff FCC No. 2, Section 7.4.10: Special Access Service, Rate Regulations, Optional Payment Plan (Term discount)

The Ameritech Optional Payment Plan ("OPP") applies to the northern Midwest regions where AT&T provides local exchange service. The OPP is a term plan. It requires no minimum volume commitment in revenues or number of circuits or channel terminations. The OPP offers rate stabilization at a discount, preventing rates from increasing while allowing customers to receive the benefit of any rate decreases. *See* Section 7.4.10. In order to obtain the guaranteed rates, the customer must commit to a term per circuit between 1 and 5 years, with the discounts scaled to increase with the commitment period.

There are several aspects of the OPP that push customers to enter into Overlay agreements as a supplement to the OPP (as TWTC has done). First, the discounts in the OPP is modest. Second, significant termination penalties apply if the customer cancels the plan before expiration of the commitment period. Generally, AT&T calculates the termination penalty by determining the closest commitment period for which the customer could have completed and applying the rate to the period of service that the customer completed. For example, if a customer subscribed to DS3 services under an OPP for a 60-month term but canceled the OPP after 37 months, AT&T would charge the customer the difference between 37 months at the discounted rate for a 36-month commitment period and the 37 months at the discounted rate for the 60-month period. *See* Section 7.4.10(C). If the customer cancels the OPP within the first year of its commitment, however, the customer must disgorge all of the discounts.

Third and more importantly, the OPP places a customer at a significant disadvantage because the term plan does not offer circuit portability. Circuit portability allows a customer to move its circuits from one location to another without having to terminate one circuit and creating a new service order for a new one at new location and paying the concomitant fees. The OPP permits such moves without the added cost of terminating and re-ordering service in specific situations only. *See* Section 7.4.10(E). For DS1 services, the customer may port its circuits without added charges only in the same LATA. For DS3 services, the customer may port its circuits only if the customer has satisfied a 12-month minimum service period at the old location and either maintains or increases both the number of DS3 service channels and the length of the

commitment period at the new location. Termination penalties apply in most other circumstances in which a circuit is terminated before the end of the term. Portability is available in the Ameritech region only through the Overlay contract discussed below, which requires larger revenue or volume commitments. The availability of portability increases the savings value of these Overlay contracts and encourages the customer to make the revenue commitment.

Qwest FCC Tariff No. 1, Section 7 Private Line Transport Service (Standard discount)
The Qwest Regional Commitment Program ("RCP") is a Standard discount tariff, which offers a discount of up to 22 percent on its DS1 or DS3 services, depending on the types of circuits selected and the time period in which the customer subscribed to the plan. *See* Sections 7.1.3(B)(1); 7.99.4.5.(A). DS1 and DS3 circuits may not be combined for an aggregate discount. **[proprietary begin] [proprietary end]**

The discounts are only available, if the customer commits to maintaining 90 percent of the total number of circuits purchased from Qwest within its 14-state region for a term of at least two years. *See* Section 7.1.3.(B)(1). For example, a customer purchasing 1000 DS1 circuits from Qwest must commit at least 900 of those circuits to the RCP in order to obtain the discount. Only 100 of the DS1 circuits in the example customer's order may be UNEs in the 14-state region. The effect of this commitment is to limit the number of UNEs purchased from Qwest, driving the majority of the customer's spend to special access or forcing the customer to increase its special access purchase in direct proportion with any increase in its UNE purchase. Additionally, given that 90 percent of its spending with Qwest is for special access circuits albeit at discounted rates, the customer's spending with Qwest is likely to increase, which makes it infeasible for the customer to shift any of its purchasing needs to competitive special access providers.

The commitment level ratchets upward automatically as the customer's volume increases. For example, if the customer purchases 1200 DS1 circuits from Qwest, the commitment level automatically increases to 1080 DS1 circuits, *i.e.*, 90 percent of 1200. *See* Section 7.1.3.(B)(4). Moreover, there is no corresponding increase in the discount upon an increase in a volume commitment. The upward ratchet merely locks additional business into the RCP. It becomes even more onerous for a customer to move its traffic from Qwest to a competitor, because the automatic increases in commitment level forces the competitor to increase its spending level, leaving it no choice but to continue purchasing from Qwest despite the availability of competitors with low rates in some of the markets where the customer provides service.

Additionally, the termination penalties also increase with the number of committed circuits, making it unlikely that a customer would benefit from switching to a competitor. Qwest applies significant termination penalties under the RCP for failure to meet the 90 percent benchmark, a request to decrease the current commitment level, or for early termination of the RCP. A customer would incur a penalty of 50 percent of the amount to be paid during the rest of the term without the benefit of the RCP discount. *See* Section 7.1.3.(B)(5). For example, if the customer's average month-to-month, non-RCP price for a DS1 were $350, a customer with 1000 DS1s that terminated its RCP with 10 months left in the term would incur a penalty of $1.75 million.

$350.00/month * 50% * 1000 DS1 circuits * 10 months = $1,750,000.00

The same termination penalty also applies to any decrease in the commitment level. A customer that decreased its commitment level from 1000 circuits to 700 circuits would pay 50 percent of the undiscounted month-to-month price for the 300 circuits multiplied by the number of months left in the contract. Failure to meet the benchmark results in the customer paying the full month-to-month price for the shortfall for the month, but the RCP discount applies to the rest of the customer's purchase. The termination penalties give the customer a powerful incentive to maintain the commitment level at Qwest in the 14-state region, with the effect of tying up the customer's business with Qwest. This is a classic example of exclusionary pricing.

Although the Qwest RCP does offer circuit portability, the ILEC uses the advantage of portability to lock the customer into a more restrictive arrangement. The RCP requires the customer commit to bringing in an additional 10 percent revenue on the circuit in the new location before it may qualify for portability. *See* Section 7.1.1(D).

This tariff supersedes a pre-existing volume tariff for special access services. The new tariff offers 2 percent more in discounts but also adds more onerous terms. While the grandfathered RCP based its commitment levels on channel terminations only, the new RCP bases its commitment levels on the full circuit, which includes mileage and multiplexing charges as well as channel terminations. *Ca.* Section 7.99.5(A).

Verizon Tariff FCC No. 1, Section 25.1 Commitment Discount Plans ("CDP") for New Jersey, Pennsylvania, Delaware, District of Columbia, Maryland, Virginia, and West Virginia. (Standard discount)
Verizon Tariff FCC No. 11, Section 25.1 Commitment Discount Plans ("CDP") for New York and New England. (Standard discount)

The Verizon Tariff 1 CDP and Tariff 11 CDP (collectively, the "CDP") are Standard tariff discounts available to any customer in New Jersey, Pennsylvania, Delaware, District of Columbia, Maryland, Virginia, and West Virginia or in New England and New York, respectively, regardless of minimum revenue. The CDP offers different discounts for each of the services that are included. For example, a customer may receive as much as 35 percent off the base rate for a DS3 special access service if it commits to a term of 5 years. *See* Tariff 1 Section 25.1.4(D). Tariff 11 CDP offers terms of up to 7 years for certain services with a discount of 40 percent. *See* Tariff 11 Section 25.1.4. **[proprietary begin] [proprietary end]**

The CDP is based on a minimum commitment of channel terminations (counted as DS0 equivalents) for qualifying services, which include both special access services and the switched access DS1 and DS3 transport, despite the competitive availability of switched access transport services. Additionally, the CDP requires that the customer roll all qualifying services, including the switched access transport elements, into the CDP once the customer subscribes to a CDP. *See* Tariff 1 Section 25.1.2.(C); Tariff 11 Section 25.1.2. The CDP sets separate commitment periods for each type of service, and a customer may not subscribe to any other discount pricing plan until all the commitment periods for each of the services have expired. *See* Tariff 1 Sections 25.1.1(E); 25.1.8(C)(1)(c).

Once set, the discounts are not subject to any decreases and, in fact, customers may benefit from increases in discounts. However, certain rates for special access and other elements are not stabilized, *i.e.*, if Verizon chooses to increase its rates, the customer will be charged the increased rates with the same discounts under the CDP even though the discounts have been stabilized. *See* Tariff 1 Sections 25.1.5; 25.1.6. Tariff 11 CDP also permits customers to take advantage of any increases in discounts during the term of the plan, but it does not commit to rate stabilization like the Tariff 1 CDP, except for NYNEX Enterprise Services. *See* Tariff 11 Sections 25.1.8; 25.1.9; 25.1.10.

Also, the CDP offers customers the option of transferring time-in-service credits from existing Term Plans into the CDP, *i.e.*, Verizon allows customers to convert years spent in a Term Plan to years spent in a CDP. *See* Tariff 1 Section 25.1.8(F); Tariff 11 Section 25.1.10. However, Verizon only provides partial credit toward the commitment period with the conversion rate dipping as low as 12 months for a full 60 months. For example, if a customer has had a term plan for DS3 special access transport for a 60 month term, the customer may roll its DS3 Term Plan into a CDP and will receive only 12 months credit under the CDP for the 60 months that it has had already subscribe to Verizon's DS3 Term Plan. *See id.*

The minimum commitment begins at 90 percent of the total number of voice grade channel termination which are in-service at the time of subscription to the CDP. The 90 percent threshold applies to all services except for digital data services (DDS), for which commitment begins at 75 percent of the voice-grade channels terminations. *See* Tariff 1 Section 25.1.3(A)(6); Tariff 11 Section 25.1.3. The discounts apply to all channel terminations included within the minimum commitment level and allows for a 30 percent overage, *i.e.*, should the customer exceed its minimum commitment level, it will receive discounts for only an additional 30 percent of the minimum commitment. *See* Section Tariff 1 25.1.7(A)(1); Tariff 11 Section 25.1.7. For example, if a customer has a minimum commitment level of 1000 DS0 equivalents but has 1500 DS0 equivalents in service at the time of the true-up, the customer will only receive discounts on the initial 1000 for its minimum commitment level and 300 additional DS0-equivalent channel terminations (30 percent of the 1000-circuit commitment level). The remaining 200 channel terminations are priced at the non-discounted rates, unless the customer elects to adjust its minimum commitment level upwards. *See* Tariff 1 Section 25.7.1(D); Tariff 11 Section 25.1.7. Such undiscounted rates are not required if the customer chooses to increase its minimum commitment level. Although the customer need not elect to choose a higher minimum commitment level, it risks paying the hefty overage penalties again if it does not.

The CDP offers no additional discount for corresponding increases in the commitment level, suggesting that there is little correlation between the committed volume of circuits and the cost of providing the circuits. Moreover, Verizon's CDP permits a customer to subscribe with a commitment level as low as 336 DS0 equivalents, no more than 15 DS1 circuits. *See* Tariff 1 Section 25.1.3(A)(5). It is more likely that the volume commitments and the incentives to ratchet the commitment levels upwards serve to lock up the customer's spending with Verizon.

Failure to meet the minimum commitment level results in a different set of penalties. The CDP requires the customer to make up the shortfall between the amount that would have been charged

to the customer at the undiscounted rate and the amount that would have been charged discounted rate under the CDP for the past 6 months. *See* Tariff 1 Section 25.1.7 (B). The customer may not reduce its commitment level for any service except for DDS and voice grade services. *See* Tariff 1 Section 25.1.3(A)(10).

Termination penalties apply to any services in the CDP when one of the services is cancelled before the expiration of the commitment period. *See* Tariff 1 Section 25.1.9(A). Verizon offers two methods of calculating termination penalties and selects the method that produces the lesser charge. *See* Tariff 1 Section 25.1.9(C). In the first method, the customer must pay 50 percent of the CDP price for its minimum commitment level for the remainder of its term. For example, if a customer with a minimum commitment level of 10,000 DS0 equivalents terminated its CDP with three years remaining, the customer would incur termination charges of $1.8 million dollars.

$10.00/month * 50% * 10,000 DS0 equivalents * 36 months = $1,800,000.00

In the second method of calculating termination liabilities, Verizon offers the customer the discounted rate for a shorter commitment period and requires the customer to repay the delta between the 5-year discount and the 3-year discount. *See* Tariff 1 Section 25.1.9.(C)(2); Tariff 11 Section 25.1.11. For example, if a customer commits to a 5-year term for special access DS1 services but terminates after 3 years, Verizon may require the customer to repay the difference between the 30 percent discount it received and the 20 percent discount it should have received. Of course, if the customer were to terminate its commitment before even the shortest commitment period, it would be required to pay back the entire discount.

Verizon's CDPs offer circuit portability. Portability under Verizon's CDPs is particularly onerous, because it requires the customer to provide the related purchase order numbers ("RPONs") for both the circuit at the old location and the circuit at the new location. It is generally unlikely that a customer would order a circuit for a new location at the same time that the circuit at the old location is scheduled for disconnection. Accordingly, customers may be forced to keep the circuit at the old location in service until the order for the new location is processed, at which point, the customer may find that the disconnection and ordering charges would have been less than the charges incurred for maintaining the active circuit.

BellSouth FCC Tariff No. 1, Section 25 Contract Tariffs, Contract Tariff No. 026 (Overlay discount)

BellSouth offers an Overlay contract tariff, which provides discounts in addition to any other discounts available through its Standard tariffs. The Overlay discounts are available only to a customer that has spent at least $10 million on qualifying services (including special access and switched access services) available from BellSouth in the preceding year and that commits to increasing its minimum revenue commitment in increments over the term of three years. *See* Sections 25.29.1(B); 25.29.1(C). The customer commits to $10 million in the first year, $10.2 million in the second, and $10.506 million in the third year. *See* Sections 25.29(E); 25.29.1(A)(1). The discounts increase in each year of the term (3 percent for the first year; 3.25 percent for the second year for anything above $10.2 million and 2 percent for anything below $10.2 million; and 3.25 percent for the third year for revenues above $10.506 million and 2

percent for anything below $10.506 million). *See* Section 25.29.3. The tariff targets growth, providing higher discounts for surpassing the minimum revenue commitments, and lower discounts for falling short of the revenue commitment. BellSouth offers a lower revenue band, which allows a customer to commit to a minimum revenue of $9 million, with similarly increasing penalties. *See id.* **[proprietary begin] [proprietary end]**

If the customer fails to meet the minimum revenue commitment, it must repay the portion of the monthly discounts that it failed to earn at the annual true-up. In the first year, the customer must pay a "shortfall charge," calculated by subtracting its qualifying revenue from the minimum revenue commitment, capped by the total amount of the discounts received from BellSouth, *i.e.*, the customer receives no discount when it fails to meet the minimum revenue commitment in the first year. *See* Section 25.29.1(E)(2)(a). In the second year, shortfall charges do not apply, and the customer will continue to receive a discount, at a lower percentage, even if it fails to meet the minimum revenue commitment. At the true-up period for the second and third years, a failure to meet the minimum revenue commitment requires that the customer repay the delta between the higher discount that it received over the months and the lower discount that it actually earned. *See* Section 25.29.1.(E)(2)(b). For example, if a customer fell short of the second year's minimum revenue commitment of $10.2 million by $0.2 million, it would have to repay $131,500.00, the difference between the higher discount and the lower discount.

Termination penalties, like the shortfall penalties, are scaled with the amount of time that the customer has spent in its commitment period. If the customer terminates in the first year, it incurs penalties of 100 percent of the rewards received for the year. In the second year, the customer must repay 75 percent of the discounts received during both years. In the third year, the customer must repay 50 percent of the discounts received all three years. In each instance, the termination penalties can exceed the amount of the discounts received for a single year of the term. *See* Section 25.29.1.(E).

SBC Tariff FCC No. 73, Section 41 Pricing Flexibility Contract Offerings
Contract Offer No. 48 - Special Access Service Offer (and accompanying tariffs) (Overlay discount)

AT&T offers an Overlay contract tariff in its legacy ILEC territory as it existed prior to the BellSouth merger that requires a minimum annual revenue commitment ("MARC") of $26.5 million in particular services in order to qualify for the discounts available under this tariff. 41.48.1. The type of services that qualify for the discounts include OPT-E-MAN Ethernet services. Once the customer chooses to participate in the tariff, the customer must purchase all such services pursuant to the tariff. SBC's Contract Tariff No. 48 is identical to Ameritech Operating Companies Tariff FCC No. 2, Section 22, Contract Offer No. 64; Pacific Bell Telephone Company Tariff FCC No. 1, Section 33, Contract Offer No. 56, and the Southern New England Telephone Company Tariff FCC No. 39, Section 25, Contract Offer No. 16, and the customer is required to participate in all of these tariffs if it chooses to participate in one. *See* Section 41.48.2(B). In short, the customer's total expenditure in AT&T's pre-merger footprint is covered by this umbrella pricing plan. Accordingly, even if there were competitors anywhere within the AT&T footprint that might be able to provide circuits at competitive rates, the

customer is likely to forego those competitive rates in order to ensure that it meets the MARC in the 13 states at issue.

[proprietary begin] [proprietary end]

The tariff offers increasing discounts over the five-year term: 0 percent for the first year, increasing, to 5 percent the second year, 10, 11, and 12 percents for the subsequent years. The discounts do not apply to all of the services that contribute to the MARC but only to a subset of those services, specifically, the services for which AT&T has received pricing flexibility. *See* Sections 41.48.1; 41.48.2(C).

The MARC begins at $26.5 million for the first two years of the term, but it ratchets upward at the beginning of the third year if the customer's spending at SBC has increased. SBC sets the third-year MARC by summing the customer's actual monthly spend for the last 3 months of the second year and multiplying that figure by 4. *See* Section 41.48.4(A). The customer may only decrease the MARC once in the 5-year term after the initial 2 years. Failure to achieve the MARC by the end of the term year requires the customer to pay a true-up payment of the difference between the MARC and the actual revenues for the year. *See* Section 41.48.4. Failure to remit the true-up payment results in termination of the contract and the concomitant penalties.

Termination penalties are significant, resulting in a total refund of 100 percent of the discounts received over the preceding 6 months prior to termination. *See* Section 41.48.9. Additionally, the customer must also pay any non-recurring charges that were waived under the contract as well as a percentage of the MARC for all five years of the term. For example, a customer terminating the contract in the third year of the term, with a third-year MARC of $40 million (with $35 million in qualifying services) will be subject to the following charges:

Termination Charges	
6 months discount for $35 million in qualifying services	$ 1,750,000.00
12.5% of the Year 3 MARC	$ 5,000,000.00
12.5% of Year 3 MARC for the remaining years of the term	$ 10,000,000.00
Total Termination Liability	**$ 16,750,000.00**

The significant penalty discourages any move from SBC's tariff. Even if a competitor were able to supply a substantial portion of the customer's demand at a significant discount, it would be virtually impossible to cover the termination penalties.

In addition to the MARC, the customer must also commit to purchasing 98 percent of the qualifying services under the tariff, limiting the customer's ability to purchase of UNEs from SBC to 2 percent of its total expenditure at SBC. *See* Section 41.48.3(E). Failure to maintain the percentages would result in termination of the contract and the subsequent penalties. This commitment has the same effect as discussed above in section on the Qwest RCP.

APPENDIX B

TIME WARNER TELECOM

CONNECTING YOUR BUSINESS TO MORE BUSINESS℠

The Adirondack Trust Compmany

Leading Community Bank Deposits Greater Network Reliability and Performance With Time Warner Telecom Services

THE COMPANY:
The Adirondack Trust Company

INDUSTRY:
Finance/Banking

EMPLOYEES:
200

BUSINESS RESULTS:

- Upgraded infrastructure to enhance competitiveness in mature market and improve customer retention
- Delivered scalable solution supporting manager's growth-through acquisition strategy
- Significantly increased capacity and performance at about the same price as legacy solution
- Enabled the roll out of future VoIP, videoconference and improved DR services

COMMUNICATIONS APPLICATIONS:

- Image & data transport
- Centralized access to banking applications
- Voice
- Future business application enabler (videoconferencing & VoIP)

The Challenge

Nestled in the mature market of Saratoga Springs New York, The Adirondack Trust Company is a market share leader. Because the growth of new accounts remained constant, the bank's forward-looking managers opted to make customer retention a top priority. Their goal was simple — to differentiate the bank from its competitors by delivering service that is superior to that offered from nearby Boston and New York institutions.

Quickly, Adirondack strategists recognized that they would need to significantly upgrade their telecommunications infrastructure to provide on-the-spot service to eager customers at the company's 10 branch locations. To do this, they needed sufficient bandwidth to support real-time data transfers among all the branches.

Moreover, managers wanted to leverage the bank's highly successful online banking application, WebWise, to provide the instantaneous access to account information that customers now consider to be the standard. And because the bank operates under strict regulatory government requirements such as Gramm-Leach-Bliley Act, Sarbanes-Oxley and the Patriot Act, any solution

would need to be highly reliable and seamlessly interoperate with the existing disaster recovery infrastructure. Not only was a highly available solution a cornerstone for delivering continuous service, but it was fundamental to supporting federally-mandated data protection processes.

With these criteria in mind, Adirondack IT managers brought in Daniel Wolk, president of technology infrastructure consulting firm Binara Inc. He recommended Time Warner Telecom to provide the telecommunications services that met the bank's stringent requirements.

The Solution

Related solutions/ technologies	Time Warner Telecom solutions
■ Cisco ONS 15327 SONET Multiservice Platform	■ Ethernet Internet Service (EIS), 4 Mbps
■ Cisco 2621 Multiservice Platform	■ VersiPak Virtually Routed Service (VRS)
■ Proprietary WebWise Internet Banking application	■ Integrated Services Digital Network Primary Rate Interface (ISDN PRI) service

The Time Warner Telecom team recommended a bundled communications package to meet Adirondack's business and data protection objectives. They worked with Wolk to design and implement a solution that included security features for the bank's LAN/WAN and Internet facilities.

Best-in-class Internet Connectivity—Ethernet Internet Service (EIS)

To achieve the real-time data recall for mission-critical banking applications, the company installed Time Warner Telecom's Ethernet Internet Service (EIS) to deliver 4 Mbps of capacity. This link provided Ethernet Internet Service to employees at the company's headquarters location.

"We're looking forward to EIS breaking a capacity bottleneck for us," said Ned Wait, director of IT for Adirondack Bank. "That will help us move more data faster to better serve our customers."

In addition to supporting banking applications such as credit scores and accessing mortgage systems, employees used EIS for general Web access. EIS also helped facilitate the increased requirement for more Web-based reporting to the Federal Reserve Bank and other correspondent institutions.

Banking Application Data Transport & Data Protection

Adirondack contracted one VersiPak Virtually Routed Service (VRS) pipe for each of the bank's 10 branches to access an online teller system application so that tellers and other employees can promptly access customer information including transaction images.

Additionally, the VersiPak VRS solution supported data protection objectives, other banking applications and ATM transactions. These private LAN extension services allowed Adirondack to transfer private data between multiple locations within its service area and to differentiate that traffic from Internet-based packets. To further boost data protection capabilities, a VersiPak VRS connection provided redundancy between the company's main data center and its disaster recovery site.

"The speed and availability of the Time Warner Telecom services give us a leg up in providing the level of service that differentiates us from our competitors. The services are faster, more reliable and better help us meet our regulatory requirements."

Ned Wait,
Director of IT
Adirondack Trust Bank,
Saratoga Springs,
New York

Upgraded Inbound Call Management—ISDN PRI

Rounding out the bundled services, Adirondack managers contracted two lines of Integrated Services Digital Network Primary Rate Interface (ISDN PRI) service. The bank's two-way calling number has been migrated from a Centrex-based platform to Time Warner Telecom's PRI service.

The Value to the Business

Financial benefits

The solution implementation met Adirondack Bank's budgetary requirements as Wait explained. "We anticipate being able to do a great deal more with the increased bandwidth and reliability of the Time Warner Telecom communications services for about the same costs as our legacy solution. They have given us tremendous value for our vendor dollar."

Speaking to the bank's retention goal Wait said, "The Time Warner Telecom services deliver the performance and capacity that improve our services today, while providing the infrastructure necessary to offer future, value-added services. We expect that to translate into a higher client retention rate."

Business benefits

Wait met the expectations of bank executives for better service by successfully upgrading his communications infrastructure.

"Time Warner Telecom's EIS, VersiPak VRS and PRI services are a huge help to an institution like ours because they help differentiate our services in the community. We can respond to customer requests faster than our competitors

by moving data more quickly among our branches and through our WebWise online banking application. Together, these things enhance our ability to retain customers."

According to Wait, the key component to the bank's growth strategy was the ease of adding more sites to Adirondack's network. "We recently acquired an insurance agency and will phase in its IT functions to boost our operational efficiencies. Currently, the business processes are paper-oriented. We're anticipating significant productivity gains by migrating those processes over to digital-based applications that make use of Time Warner Telecom's VersiPak VRS and EIS."

Another important business driver was the desire to offer future enterprise-wide services to cut costs and improve employee efficiency. "With the capacity and reliability of our new fiber services, we're looking to deploy VoIP and videoconferencing services in the next year or so," explained Wait. "We couldn't have done that over the twisted pairs we relied upon previously."

From a data protection perspective, Wolk will reevaluate the bank's disaster recovery plan in light of the new, more flexible fiber services. "The Time Warner Telecom network reach gives Adirondack the ability to move its disaster recovery site much further away from their headquarters to guard against any county-wide disruption."

Technology benefits

In an area prone to communications disruptions as small as light rain storms, the new fiber-based services provided welcome relief as Wait explained. "As our branch locations migrate to the Time Warner Telecom fiber services, we expect those environmental issues to go away."

Additionally, the redundancy and capacity of the communications disaster recovery-site solution gave Wait the confidence that his applications would either remain online during a disaster or recover more quickly with minimal downtime.

In light of 9/11, the security of financial data has become an even greater priority. "The regulatory requirements and new applications add significantly to file sizes and the speed of the Time Warner Telecom fiber solutions helps the bank more efficiently collect, store and move around that data," said Wolk. "I don't see the reporting and security requirements being eased any time soon so it's comforting to know that they can easily scale bandwidth to accommodate future, stricter regulatory standards."

From an operational perspective, contracting a single communications company for multiple solutions sidestepped a potential security headache for the bank. “Dealing with a single vendor considerably streamlines the process to integrate and manage data security for business continuity,” explained Wolk.

The Time Warner Telecom Experience

Speaking to his experience with Time Warner Telecom, Wait said, “They were so responsive that they consistently finished project tasks before we were ready to act on them. Since we’re dealing with cutting edge services, we’ve been pleasantly surprised at how well things have gone.”

That’s in contrast to other vendors. “Our experiences with other phone companies have been less than stellar, particularly with new technology. In fact, the Time Warner Telecom sales folks were so responsive that they completed the sales process and implemented the circuits faster than other providers could even submit a proposal.”

About The Adirondack Trust Company

Named one of the 100 safest banks in America, The Adirondack Trust Company serves the community banking needs of Saratoga Springs and its surrounding areas. As New York State Senator Edward T. Brackett (founding President) wrote in 1916, “the bank is managed not only for the proper purpose of making money for its stockholders, but also for the development of the community where it is located and to be an example of high dealing for all those who come in contact with it.” These sentiments remain the guiding force behind the management of The Adirondack Trust Company. To learn more, please visit us at www.adirondacktrust.com.

About Time Warner Telecom

Time Warner Telecom Inc., (NASDAQ: TWTC), is a leading provider of managed network services, specializing in Ethernet and transport data networking, Internet access, local and long distance voice, VoIP and security, to enterprise organizations and communication service companies throughout the U.S. Headquartered in Littleton, Colorado, Time Warner Telecom focuses on delivering converged networking and next generation services that drive economic value, quality, service and improved business productivity for customers. Please visit www.twtelecom.com for more information.

TIME WARNER TELECOM

CONNECTING YOUR BUSINESS TO MORE BUSINESS℠

Boise State University

Boise State University Graduates to Largest National Education VoIP Deployment With Time Warner Telecom IP-based Solution

THE COMPANY:
Boise State University

INDUSTRY:
Education

EMPLOYEES:
2,200

COMMUNICATIONS APPLICATIONS:

- Voice over IP implementation
- Economical long distance calling
- Inter-facility voice/data/video connectivity

TIME WARNER TELECOM SOLUTIONS:

SIP Trunk (SIP IP Trunking)

Metro Ethernet Service (Native LAN Service)

RELATED SOLUTIONS/ TECHNOLOGIES:

Cisco CallManager IP PBX server-based application

BUSINESS RESULTS:

- VoIP-enabled solution cut call expenses by 50 percent
- Eliminated six gateway devices via direct-connect SIP trunk
- Simplified network to significantly reduce administration effort
- Metro Ethernet upgraded remote campus user status to real time application access

The Challenge

Several years ago, Boise State University IT managers looked to the future of communications technology. They reviewed their expenditures. They talked about their dealings with their communications vendor. And in the end, they decided to convert their copper-wire based voice network to a fiber-based, voice over Internet protocol (VoIP) network.

It wasn't an easy journey. At the time, their vendor was a monopolistic-minded incumbent local exchange carrier (ILEC). According to Brian McDevitt, manager of telephone network services, for the University, "It was always frustrating because it was such a chore to get any customer service out of them."

So motivated by poor service, the desire to deploy productivity-enhancing technology and trim expenses and effectively connect the school's three main campuses, Boise State managers issued an RFP. In the end, Time Warner Telecom won the bid to implement a plan to replace 1,000 copper lines with a fiber solution.

"Time Warner Telecom helped us achieve our goal of bringing all service on campus onto fiber," explained McDevitt. We saw a need to be on metro fiber to reduce prices and scale circuits effectively to pace our fast growth."

Later, Boise State managers decided to simplify their network further by taking the next evolutionary VoIP step. They issued an RFP for a Session Initiation Protocol (SIP) trunk that would connect directly to their VoIP PBX. Again Time Warner Telecom won the competitive bid.

Fueled by the new services, Boise State's VoIP deployment had grown to 14,000 DIDs and 4,000 handsets, making it the largest nationwide among Universities, 65th overall nationwide and 145th worldwide.

The Solution

Services

Boise State initially deployed Time Warner Telecom's Metro Ethernet service (Native LAN). The two 100 Mbps pipes linked the University's main and two remote Canyon County and Boise West campuses. These moved the network from divergent voice/data communications to converged Ethernet circuits which carry data, video and voice traffic.

Later, Boise State network engineers worked with Time Warner Telecom experts to replace eight T1s with a single 20 Mbps Quality-of-Service-enabled SIP trunk at the main campus. The SIP service connects directly to the University's Cisco CallManager VoIP PBX system and provides PSTN termination for unlimited local calls. To meet business continuity objectives, McDevitt runs CallManager on three clustered servers across campus.

The Value to the Business

Financial benefits

Boise State managers leveraged the new technology to good effect. "We figure the new solution will be about half the cost of what we paid previously," explained McDevitt. "That's possible in part because the SIP trunk allows us to access on-net long-distance Time Warner Telecom nodes for free. Those are important considerations for a state-funded university."

"The Time Warner Telecom SIP Trunk is a key element of our VoIP implementation. It is highly scalable, interoperates with our Cisco CallManager application, and will substantially cut our costs. We believe SIP technology will revolutionize business communications the way VoIP has changed the residential landscape."

Brian McDevitt
Manager of Telephone Network Services
Boise State University

Boise State University

By connecting directly to Boise State's network, the SIP trunk enabled the retirement of six gateways formerly used to connect to T1 digital service. "Not only did that simplify our network, it gave us savings in administration and maintenance costs," said McDevitt.

The easier-to-administrate VoIP phone system contributed to McDevitt's ability to hold the line on headcounts too. That's in spite of significant growth in recent years that has doubled the size of the University's phone network.

Business benefits

The metro Ethernet solution allowed McDevitt's team to economically and efficiently connect the school's Main, West and Canyon County campuses. This eliminated the need to use costly tie lines or the related hardware and maintenance that would have been required with an alternative solution.

Shortly after moving to a VoIP implementation, Boise State technicians began running a single line to desktops versus the two-wire harnesses they ran before. "Being able to lay one data cable to the desktop and split it for phone service really reduces our overhead costs," stated McDevitt. "We can turn up new stations quicker and more efficiently."

In referring to the University's deployment of Time Warner Telecom's metro Ethernet service, McDevitt said, "Our remote locations are about 15 miles apart. By replacing T1s with the 100 Mbps service we were able to upgrade users at remote sites to real time status."

From an employee/student productivity perspective, McDevitt is bullish on VoIP's future potential. "We're looking forward to the next generation of applications. For example, students, faculty and administrators will eventually be able to click a link on a website to be connected automatically. When you multiply the seconds of time savings that gives you by the thousands of times it would be used daily, it adds up."

Another VoIP benefit has been easing the burden on the school's help desk. The new phones use intuitive web-based interfaces that replace arcane phone customization button sequences of old.

Technology benefits

The new solution enabled the IT team to converge their voice and Internet traffic. This eliminated the need to manage, maintain and update separate voice and data networks and their related infrastructure.

According to McDevitt, the SIP implementation simplified the administration of his networks. “The converged voice and data network means we only need to worry about a single connection. From a personnel skill-set perspective, that means I can run voice and data services with people experienced with data networks.”

Additionally, by providing an IP handoff, the Boise State IT staff was able to fully utilize their IP PBX LAN infrastructure to support local calling and inter-office calling for faculty, staff and students.

Since migrating to Time Warner Telecom’s fiber, Boise State has upgraded to greater bandwidth, scalability and business-class service. Specifically, the SIP trunk service scales from two to hundreds of Mbps capacity. And McDevitt describes the service as “clearer with less static than the old solution.”

Another service advantage has been reduced downtime. Before, if a T1 had a bad channel it had to be configured out of the CO. “When you change to SIP trunking everything becomes software controllable,” stated McDevitt. “We can compress channels, alter data streams and do a lot of other things. It’s much more configurable by us. We could do almost nothing with the old T1s.”

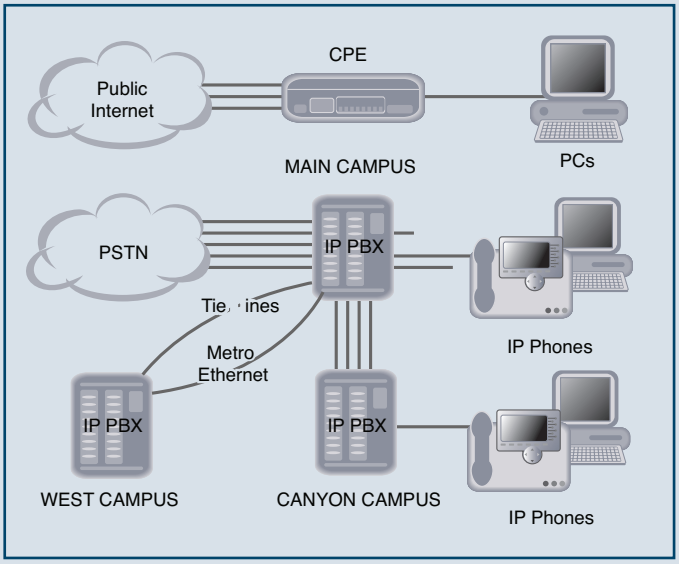
From a network topology standpoint, the SIP trunk deployment eliminated potential points of failure. “We retired six T1 gateway devices we no longer needed,” explained McDevitt. “We just dropped the SIP line onto our main university routers and were good to go.”

The Time Warner Telecom Experience

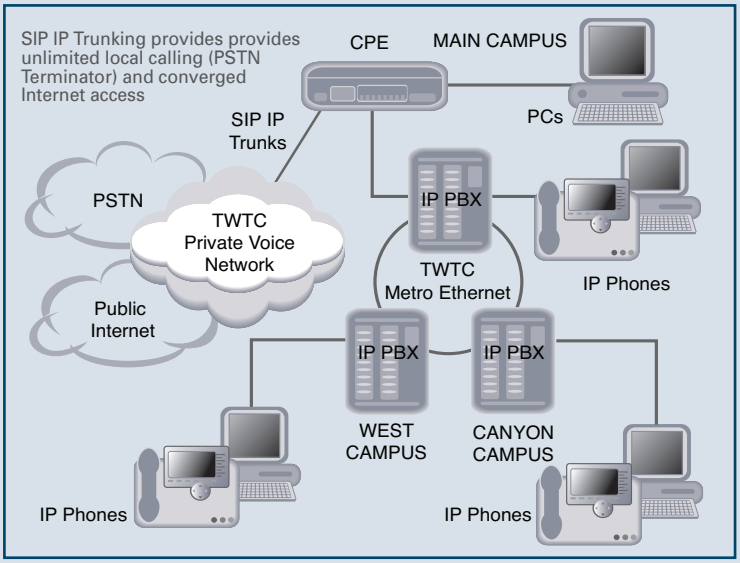
Time Warner Telecom put to rest customer service issues for Boise State managers. “It’s been very refreshing to have a sales person continue to follow up with me after the sale,” explained McDevitt. “There was no drop off in responsiveness to our needs or to any issues. Unlike our former provider, I talk to people at the CO down the street if there’s a problem instead of some guy in Denver.”

As for the SIP deployment, “The process as been great so far. Time Warner Telecom brought in industry experts to make sure this new technology goes in perfectly the first time. The project schedule was well planned and it’s been pleasant dealing with their management, technicians and experts.”

BEFORE:
Legacy Voice Deployment with PRIs and Separate IP access for Internet.



AFTER:
SIP IP Trunks Deployment with Converged VoIP and Internet across Metro Ethernet.



Boise State University

About Boise State University

Boise State University is the largest institution of higher education in Idaho with about 18,600 students and 2,200 faculty and staff. More than 190 undergraduate, graduate, doctoral and technical degrees are offered within eight colleges. A metropolitan university located in the capital city, Boise State is committed to life-enhancing research, teaching excellence and public service. www.boisestate.edu.

About Time Warner Telecom

Time Warner Telecom, headquartered in Littleton, Colo., provides managed network services, specializing in Ethernet and transport data networking, Internet access, local and long distance voice, VoIP and security, to enterprise organizations and communications services companies throughout the U.S. As a leading provider of integrated and converged network solutions, Time Warner Telecom delivers customers overall economic value, quality, service, and improved business productivity. With nearly 20,000 route miles of its own local and regional fiber networks, a national IP backbone with 10 Gbps capacity, and nearly 5,300 buildings connected directly to its fiber networks, Time Warner Telecom provides the local “last mile” of reliable communications services to customers. Please visit www.twtelecom.com for more information.

TIME WARNER TELECOM

CONNECTING YOUR BUSINESS TO MORE BUSINESS℠

CITY OF Clearwater

City of Clearwater, Florida

Time Warner Telecom Optimizes City of Clearwater's Internet Service — Triples Bandwidth at 80 Percent of the Cost

THE COMPANY:
City of Clearwater, Florida

INDUSTRY:
Government

EMPLOYEES:
1,850

BUSINESS RESULTS:

- Saved $24,000 per year over alternative vendors
- Tripled Internet capacity at about 80 percent of the cost
- Upgraded Internet connection availability to protect against hurricane service disruptions

COMMUNICATIONS APPLICATIONS:

- E-government applications
- Employee Internet access
- WAN data transport

The Challenge

Florida's City of Clearwater serves a population of over 108,000 residents. In order to better serve their citizenry, city managers leverage the Internet with a City of Clearwater Web Portal. This resource makes it convenient for people to pay their utility bills online, access hurricane-season weather, road-closure information, and much more.

Dan Mayer, the director of Information Technology for the City of Clearwater provides the technical infrastructure to support the City's e-government initiatives. In an effort to stretch his IT vendor dollars, he reviewed his current Internet contracts with the goal of significantly boosting his bandwidth at a reasonable cost.

After weighing his options, Mayer selected Time Warner Telecom to deliver the Internet and WAN connectivity he required.

The Solution

Time Warner Telecom terminated a redundant, weather-resistant SONET fiber ring into the City of Clearwater's main building. From this, they received a full-duplex 10 Mbps Ethernet Internet Service (EIS). The EIS was then connected into the City's Wide Area Network (WAN) and is now utilized by the various City departments.

Applications

"We're using the EIS to support our City's main web site, e-commerce capabilities and other services that we deliver," said Mayer.

The Value to the Business

Financial benefits

The EIS had an immediate financial impact as Mayer explained. "We're getting the Internet service for about 80 percent of what others were offering. So we're saving about $24,000 per year which is a better value for our citizens. Optimizing taxpayer contributions is always a top priority with us."

Working with the Time Warner Telecom team evolved into a money-saving partnership relationship. "Their staff was happy to provide us information that would have cost us plenty to conduct our own research," said Mayer. "Whenever you do consulting, you'll easily spend $5,000 to $10,000 for someone to push paper in front of you."

Business benefits

Mayer credits Time Warner Telecom with transforming the communications landscape in the area. "They created a more competitive vendor environment by offering a quality, economical solution in a market previously dominated by one provider. That's been a big benefit to our citizens."

The scalability of EIS met another important City criteria—working with a vendor that can accommodate the city's inevitable population growth. And qualitatively, the 10 Mbps throughput will allow the City to upgrade its Web portal functionality to include streaming video for its users.

Technology benefits

The EIS solution delivers bandwidth using the standard Ethernet protocol. This gives the City easy plug-and-play connectivity to their WAN. Moreover, the City's limited staff can mange the solution using their existing Ethernet knowledge base rather than having to learn an alternative protocol.

By running SONET-based fiber directly into the City's main facility, Mayer was able to boost the reliability of his Internet-based services. "We didn't lose connectivity during the hurricanes last year. We've had intermittent service disruptions with smaller CLECs in the past, but in contrast, the quality of service Time Warner Telecom has given us has been excellent." The EIS service effectively tripled Mayer's Internet bandwidth. As a result, he was

"The Time Warner Telecom Ethernet Internet Service tripled our bandwidth at about 80 percent of the cost while delivering SONET-level reliability in our hurricane-prone area. The quality of service we're getting easily outshines the competition."

Dan Mayer
Director of Information Technology
City of Clearwater, Florida

able to consolidate Internet contracts with multiple vendors from various City departments. "In the end, we tripled our capacity across the board at about 80 percent of what we were paying previously."

The EIS bandwidth and scalability gave Mayer options he never experienced. "We're exploring a disaster recovery solution. That's an example of how the new service has given us options that we simply didn't have before."

The Time Warner Telecom Experience

Mayer doesn't mince words when speaking of the telecommunications providers in his area. "The service we received from the incumbent here doesn't even compare to what Time Warner Telecom has delivered. They don't make mistakes on your bill and they call you back when you call them. I know that sounds fundamental, but that's how bad the market is here."

The Time Warner Telecom Account Executive also earned high marks. "What impressed us about him is that he acted more as a technology partner than a sales guy. He consulted us on best-of-breed solutions and hooked us up with other reliable vendors when it was appropriate. Our resources are limited so it's nice to work with someone who has a network of pre-qualified vendors for us to draw upon when we need to."

Time Warner Telecom Performance Metrics Summary

Goal	Before Time Warner Telecom Solution	After Time Warner Telecom Solution	Result
Increase bandwidth	About 3 Mbps	10 Mbps	Tripled the bandwidth
Cut costs	Baseline	Baseline less $24,000 annually	Cut costs by $24,000 per year
Improve availability	Vulnerable to outages	SONET-based service	No service disruptions to date

City of Clearwater, Florida

Clearwater, Florida is a progressive city that is committed to enhancing residents' lives while preserving a heritage that is rich in culture and exquisite in landscape. Here you'll find everything you could expect from a tropical paradise - and much more. Clearwater is the county seat of Pinellas County and is located on the highest coastal bluff in Florida. According to the U.S. Census Bureau, the population of Clearwater is over 108,000 residents. Please visit us at www.myclearwater.com.

About Time Warner Telecom

Time Warner Telecom Inc., (NASDAQ: TWTC), is a leading provider of managed network services, specializing in Ethernet and transport data networking, Internet access, local and long distance voice, VoIP and security, to enterprise organizations and communication service companies throughout the U.S. Headquartered in Littleton, Colorado, Time Warner Telecom focuses on delivering converged networking and next generation services that drive economic value, quality, service and improved business productivity for customers. Please visit www.twtelecom.com for more information.

TIME WARNER TELECOM

CONNECTING YOUR BUSINESS TO MORE BUSINESS℠

Lone Star, R.S. Platou Inc.

International Shipping Broker Charters Time Warner Telecom VoIP Service to Sink Long Distance Phone Charges

THE COMPANY:
Lone Star, R.S. Platou Inc.

INDUSTRY:
Ship Brokering

COMMUNICATIONS APPLICATIONS:

- VoIP calling
- Ethernet LAN connectivity

TIME WARNER TELECOM SOLUTIONS ONE SOLUTION CONNECT:

- IP Trunk service, 2 Mbps capacity
- Fully-managed Cisco VoIP gateway
- Ethernet Internet Service (EIS)

BUSINESS RESULTS:

- Cut international call rates by about 80 percent to save $12,000 per year
- Created easier-to manage integrated voice/data communications network

The Challenge

Lone Star is a successful tanker chartering company. Its employees specialize in matching freight customers with the best cargo ship for the task. While workers focus on the Caribbean market the international nature of the shipping business correlates to an international long distance phone bill of over 72,000 minutes.

"We've been very satisfied with Time Warner Telecom's Ethernet Internet Service [EIS]," said Sophie Williford, office manager for Lone Star in Houston. "So when they came to us to discuss the voice over IP [VoIP] service, we became very excited about the potential cost savings."

The Solution

IT managers simplified their communications network by converging their voice and data traffic onto a single, scalable multi-service transport connection. They did this by adding Time Warner Telecom's IP Trunk service to their installed EIS transport. Their existing 10 Mbps EIS service—delivered on a 10 Mbps port—was upgraded to a 100 Mbps port. This gave Lone Star the

headroom to accommodate the additional 2 Mbps of bandwidth for the IP Trunks plus more capacity for future company growth.

The incoming EIS bandwidth was delivered to a FastE router (LAN connectivity) and to a managed Cisco Gateway (voice line connectivity). The Gateway linked to the company's Panasonic KXTD A200 PBX. Minor adjustments enabled Lone Star to use its existing PBX—thus sidestepping an expensive IP PBX upgrade. This offered a cost-effective path to implementing a VoIP solution.

"The Time Warner Telecom voice over IP service allowed us to cut our international calling costs by 80 percent. Down the road, we'll also be able to implement all sorts of productivity-enhancing applications. And by combining it with our Ethernet Internet Service, we now have a simpler, easier-to manage integrated voice and data network."

Greg Stringfellow
IT manager
Lone Star, R.S. Platou Inc.

The Value to the Business

Significantly Lower Costs

"We project that Time Warner Telecom's VoIP service will save our company $36,000 over the next three years," said Williford. "They certainly delivered what our sales representative said they would."

Seamless Quality of Service

Time Warner Telecom's VoIP service combats latency and packet loss problems by prioritizing traffic end-to-end over its private IP infrastructure.

"The quality of the packet-based service has been so high that no one noticed when we switched over," explained Greg Stringfellow, IT manager for Lone Star in Houston. "Delivering as good or better service to my end users at a lower cost is a win-win for our company."

Minimal Administration

According to Stringfellow, the converged Time Warner Telecom network connection requires very little day-to-day administration. "The additional VoIP service didn't increase our network management overhead at all. Time Warner Telecom manages the VoIP Gateway which saves us the time it would take to do that."

Highly Responsive Partner

Regarding the performance of the Time Warner Telecom team, Stringfellow stated, "The customer service and support was excellent throughout and after the sales cycle."

Lone Star, R.S. Platou Inc.

About Lone Star, R.S.

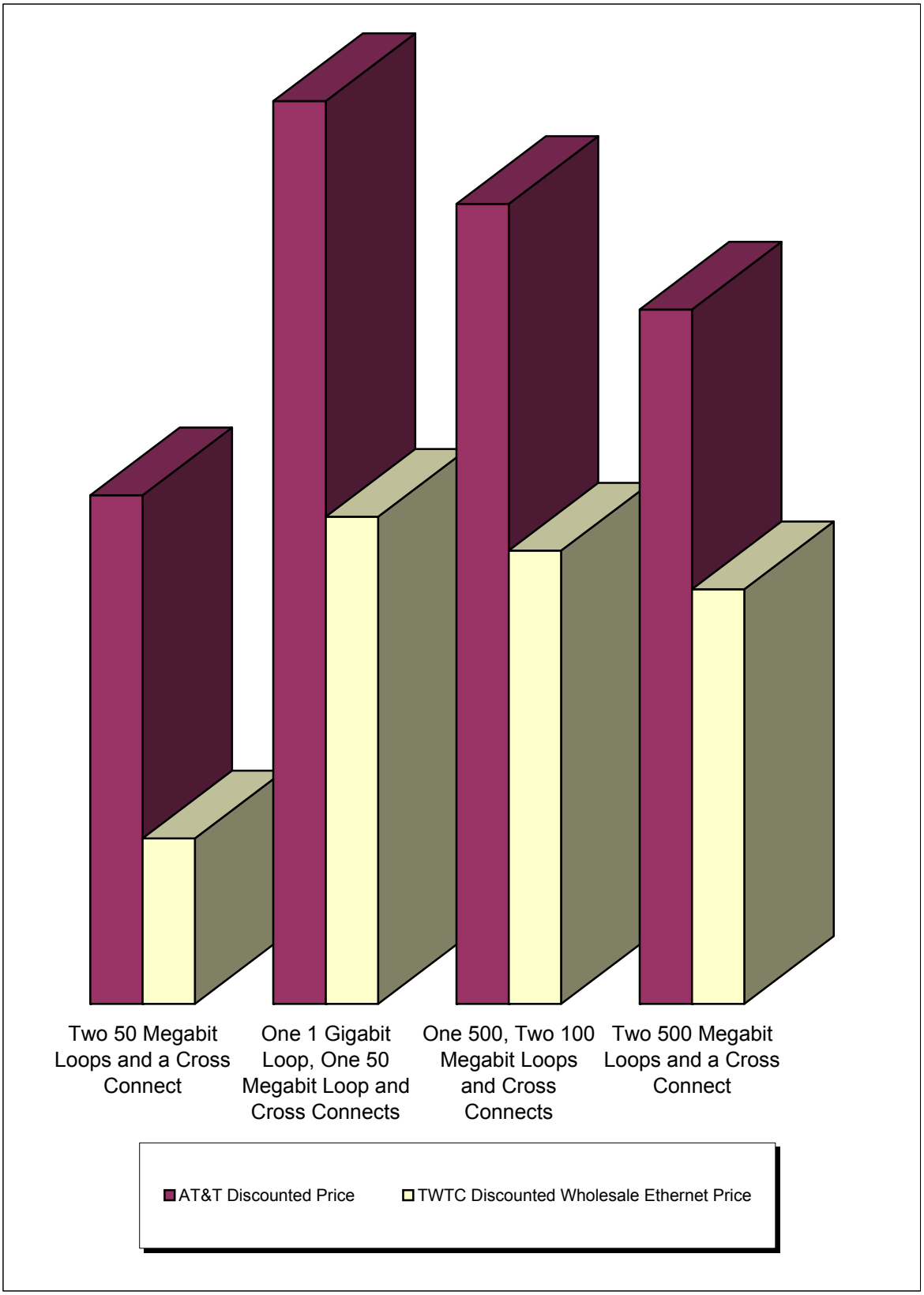
Lone Star, R.S. Platou Inc. is an international ship brokering company originally established in 1997 as Lone Star Tankers. The original partnership was established to provide quality tanker brokerage service in the U.S. Gulf where, prior to this date, such service was very limited. This vision was quickly realized and Lone Star Tankers developed into an active spot tanker brokerage shop with specialized knowledge of the Caribbean market. Today, Lone Star is considered one of the premier tanker chartering shops in North America. With its wide range of contacts including owners and major oil charterers, Lone Star negotiates voyage, time charter and project contracts for all sizes of vessel from Ultra Large Crude Carriers to small Chemical Carriers, in a highly competitive market. Please visit us at www.platou.com.

About Time Warner Telecom

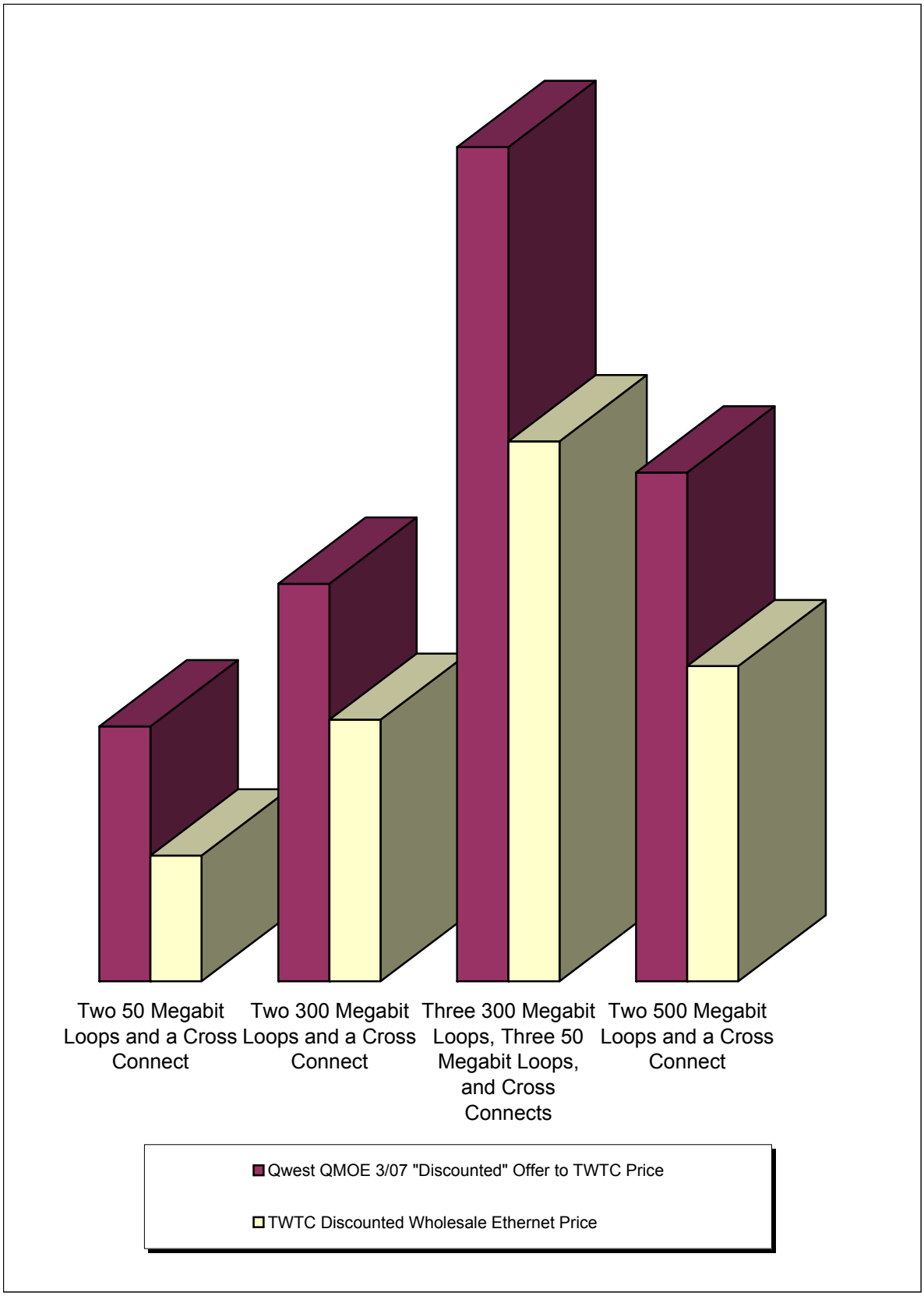
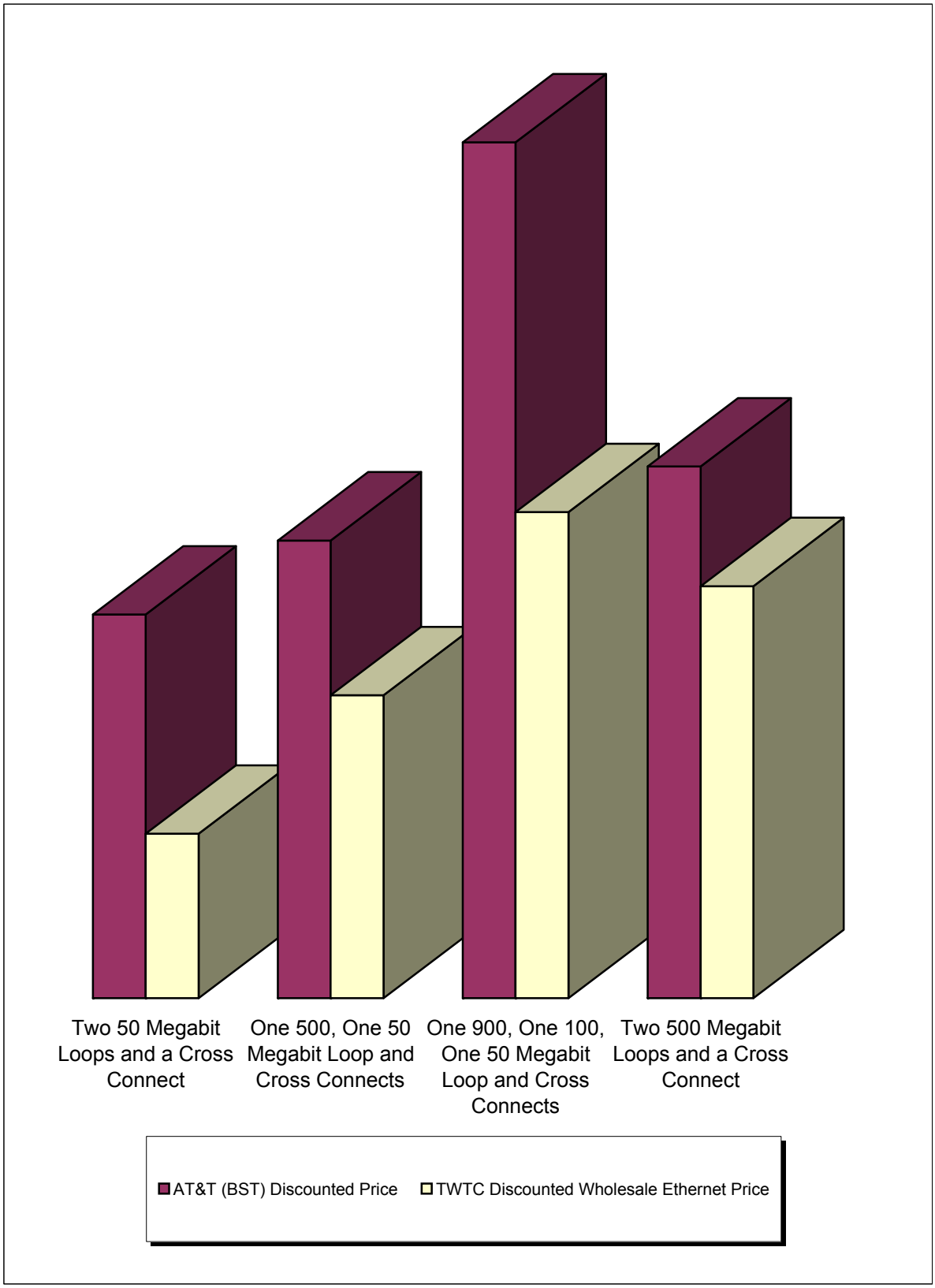
Time Warner Telecom Inc., (NASDAQ: TWTC), is a leading provider of managed network services, specializing in Ethernet and transport data networking, Internet access, local and long distance voice, VoIP and security, to enterprise organizations and communication service companies throughout the U.S. Headquartered in Littleton, Colorado, Time Warner Telecom focuses on delivering converged networking and next generation services that drive economic value, quality, service and improved business productivity for customers. Please visit www.twtelecom.com for more information.

APPENDIX C

AT&T (SBC) and Time Warner Telecom Discounted Ethernet Pricing Scenarios



Qwest and Time Warner Telecom Discounted Wholesale Ethernet Pricing Scenarios



AT&T (BST) and Time Warner Telecom Discounted Ethernet Pricing Scenarios