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

In the Matter of	)	
Unbundled Access to Network Elements	)	WC Docket No. 04-313
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338

DECLARATION OF WIL TIRADO
ON BEHALF OF XO COMMUNICATIONS, INC.

I, Wil Tirado, hereby declare under penalty of perjury, that the following is true and correct:

1. I am employed by XO Communications, Inc. ("XO") as its Director of Transport Architecture. My business address is 11111 Sunset Hills Road, Reston, Virginia 20190. My primary job responsibilities include providing overall direction for the evolution of XO's network from both a technical and financial capabilities perspective. In other words, I specify what technology is deployed and how we allocate our capital funds to expand the XO network. Previously I was employed by Bell Atlantic, now part of Verizon, in a similar function.

2. Following its acquisition of Allegiance Telecom last June, XO became the nation's largest facilities-based Competitive Local Exchange Carrier ("CLEC"). Based in Reston, Virginia, XO owns and operates fiber optic rings with associated switching and fiber optic equipment that serve **70 metro area markets in 26 states**. XO now has almost **150** Class V5 circuit switches (Nortel DMS500 and Lucent 5ESS) and VoIP softswitches (Sonus). XO also has deployed **7,136** route miles of its own fiber optic facilities composed of **884,827** fiber miles of

metro fiber transport facilities. The company offers a complete set of telecommunications services including local and long distance voice, Internet access, Virtual Private Networking, Ethernet, Wavelength, Web Hosting and integrated voice and data services. Services are provided to more than **180,000 business customers** by means of a combination of the company's own facilities, Incumbent Local Exchange Carrier ("ILEC") unbundled network elements ("UNEs") and facilities and services purchased from other competitive telecommunications carriers, and through XO's Tier One Internet peering relationships. The company also is one of the nation's largest holders of fixed wireless spectrum, potentially covering **95 percent** of the population of the 30 largest U.S. cities.

I. XO PURPOSE AND SUMMARY

3. The purpose of this Declaration is to explain the critical importance to XO of DS-1 and DS-3 high-capacity unbundled loop and interoffice transport UNEs. I will describe how XO utilizes DS-1 and DS-3 loop UNEs to provide last mile connectivity to buildings passed by our SONET metro fiber optic rings. In Part II hereof, I will discuss how critical the availability of economic DS-1 and DS-3 loop facilities is to XO's ability to provide competitive telecommunications services. Then in Part III, I will explain how XO decides to build its own loop facilities into buildings, and show how it normally is not feasible for XO or other CLECs to construct their own wireline DS-1 and DS-3 UNE facilities. In Parts IV and V, I will demonstrate that wireless loop technology and cable television systems are not adequate substitutes for wireline DS-1 and DS-3 UNE loops. In Part VI, I will explain why it is critical for XO to purchase unbundled DS-1 and DS-3 transport UNEs from the ILECs on most interoffice routes. Finally, in Part VII, I will explain why resale of ILEC Special Access services cannot sustain competitive entry.

4. In this Declaration, I will explain that XO is a facilities-based CLEC that is committed to deploying its own facilities wherever such construction can be economically justified. We believe that the key to long-term success lies in the installation and use of our own facilities wherever reasonably possible. Let there be no doubt, we prefer *not* to rely upon using the facilities of our principal competitors – the ILECs – to fill out our networks. But as was made clear by the bankruptcies experienced by most facilities-based CLECs over the past several years, constructing facilities based "on spec," where customer demand is not assured, is an unsustainable business proposition. This is especially true now, as the capital markets are simply "closed" to supporting facilities construction where efficient near-term use is not clearly demonstrated. Thus, we simply must have access to high-capacity ILEC UNEs while we expand our networks and build our customer base.

II. HIGH-CAPACITY LOOPS ARE ESSENTIAL TO XO

5. XO's base of more than **180,000 customers** is primarily comprised of small and medium sized businesses. These businesses normally aggregate loops on their premises with a PBX or Key System. The vast majority of such customers (approximately 80%) subscribe to services which require that they connect to our backbone network over T-1 or Integrated Access PRI facilities. As a general matter, small and medium sized business customers are connected to the XO network with DS-1 loops, while we use higher capacity DS-3 and OCn facilities to serve large corporate users and other carriers. XO offers a suite of services (Business Trunks, ISDN PRI, Integrated Access, etc.) that are ideally suited for any small or growing company or office location with moderate bandwidth (128 Kbps to 1.024 Mbps) requirements. Such customers often elect an integrated access product, in which the customer's local, long distance and Internet access are delivered over the same loop facilities. Whenever the customer requires at least 6 lines/trunks with a minimum of 14 channels, XO provides the service via DS-1 access. Since these are by far

our most popular products with customers, we estimate that approximately **80%** of the loops used by XO to connect to our customers are at the DS-1 level.

6. From the foregoing, it is apparent that DS-1 and DS-3 level loop connectivity to customers is absolutely essential to XO's ability to deliver services to our business customers. We currently obtain these high-capacity loop facilities in a number of ways. Sometimes we build our own fiber optic facilities into a building and create a DS-1 or DS-3 channel connecting to our backbone network. Other times we purchase loop facilities from other competitive carriers. However, as I will explain later in this Declaration, the availability of those options — albeit preferred — are extremely limited. Thus, in the vast majority of instances we must rely upon the use of ILEC UNE Loops facilities to connect to customers at the DS-1 or DS-3 level.

7. The business services market is extremely competitive. We compete for customers based in large part upon our ability to provide superior service levels, new service options, route redundancy and attention to customer service. However, these service differentiating features are not sufficient to make sales unless we also are competitive on price. The bottom line is that XO is normally unable to convince customers to subscribe to its services unless it offers a lower price than the ILEC for comparable services. The need to be the low-cost alternative is a simple fact of life when you are competing against an incumbent monopoly with established brand name recognition.

8. Our business services typically are offered on very tight operating margins. Unlike the ILECs, we have no monopoly services that can be used to cross subsidize unprofitable operations elsewhere in our business. Thus, we are unable to price below cost on any of our significant service offerings and remain in business. Thus, it is imperative that we control costs,

and that critical inputs to our cost of service not exceed similar costs incurred by our primary competitors — the ILECs.

9. As I explain in Part III hereafter, it simply is not economic for XO to build its own DS-1 loop facilities. Similarly, it is not economically feasible for XO to construct DS-3 facilities unless it has at least 3 DS-3s of capacity under contract. Thus, in the vast majority of cases, we must purchase DS-1 or DS-3 loop facilities from the ILECs to serve our large base of business customers. Of course, XO is able to order such services out of the ILEC Special Access tariffs, but as I shall explain later in Part VII hereof, use of ILEC Special Access to provide local telecommunications services is not economic. Since ILEC Special Access rates are not set based on any cost-based pricing principles, and ILECs commonly build enormous profit margins into their Special Access rates, XO is simply unable to price retail services competitively when it must use ILEC Special Access services to connect to customers. Thus, we must rely upon the availability of ILEC DS-1 and DS-3 loop UNEs priced based on total element long-run incremental cost (TELRIC) costing principles to serve our customers economically. It is only when we have cost-based ILEC DS-1 and DS-3 loop facilities available that we can compete for customers based on a level economic playing field.

10. Notably, the DS-1 and DS-3 loops that we lease from ILECs are of two types. We use both UNE Loops and Enhanced Extended Links/Loops ("EELs"). In both cases, XO is required to establish collocation arrangements in ILEC central offices to obtain access to these loop facilities. XO currently operates approximately **900** such collocation arrangements in **70 markets** across the country. Such collocation arrangements are very costly. We estimate that XO incurs approximately **$500,000** over the first three years at each collocation site. These costs include building the collocation space, recurring charges for rent and power, plus the costs of purchasing and installing equipment to outfit the collocation space.

11. Thus, XO relies on the availability of cost-based DS-1 and DS-3 loop UNEs to serve most of our customer base. Without access to ILEC-provided DS-1 and DS-3 UNE loops priced at cost, our existing business would be jeopardized.

III. XO CANNOT BUILD ITS OWN WIRELINE HIGH-CAPACITY LOOP FACILITIES

12. XO is a facilities-based CLEC. We build our own fiber optic transmission networks and install our own switching equipment wherever it is economically feasible for us to do so. We have invested very heavily in constructing such network facilities. Indeed, we have spent approximately **$5 billion** to establish metro rings to serve **70 metropolitan areas**, and currently operate **146 switches** and **7,136 route miles** composed of **884,827 fiber miles** of metro fiber transport facilities.

13. Whether the service provided to customers is switched or dedicated, the loop facility is the most basic component of the network required to serve a particular customer. However, the economics of building loop facilities is fundamentally different than the economics of deploying switching and transport facilities. When XO installs switches and transport facilities, those network components are used in common (and paid for) by many customers. By contrast, a loop facility is dedicated to the use of one customer or in limited instances a very small group of customers. Given the very high cost of facilities construction, it can be financially feasible to build transport and switching facilities in areas where there is adequate aggregate potential demand in place, whereas for it to make financial sense to build loop facilities you mush have the assurance that a particular customer, or group of customers will contract with you to provide very high-capacity services over an extended period of time.

14. By way of background, when XO constructs a Metro Fiber (MF) Ring, it does so in a manner that identifies geographically proximate commercial buildings that house as

many potential customers as possible; if such customers are located in buildings that are reasonably close together, we attempt to design and build the metro ring to pass directly by as many of those buildings as possible. Buildings that are directly on XO's Metro Fiber Ring can be served with our own loop facilities. In some markets, as a result of growth or capacity issues, XO may build a smaller second fiber ring. In such cases, XO not only evaluates the building location of potential customers, but it also evaluates the buildings that house its principal existing customers in an attempt to place as many buildings on the MF Ring as possible. I have included the map of XO's San Francisco Metro Fiber Ring to illustrate this point (**Attachment A** hereto). The Metro Fiber Ring consists of interoffice fiber optic facilities deployed between XO's switch locations and the ILEC central offices, and collocation equipment installed in the ILEC central offices. Other than customers in the limited numbers of buildings on the XO MF Ring, XO serves its customers by ordering loops (UNE loops whenever available) from the XO collocation space at the ILEC central office to the end user. While XO has constructed MF Rings in most of the market areas in which we provide local exchange services, deploying MF Rings is extraordinarily expensive and thus does not occur on a consistent basis. Consequently, connection to customers via an MF Ring is the exception, not the rule, and simply is not an economic alternative for the vast majority of potential customers.

15. The final component is the Building Lateral. The vast majority of commercial buildings are NOT located on our MF Rings. Thus, if XO wishes to serve customers located in those buildings with our own loop facilities, we must construct a building "lateral," connecting the building to our MF Ring. Specifically, we must trench, install conduit, and pull fiber between the MF Ring and the building to be served; and then we must obtain and outfit equipment space in the building itself.

16. As noted, merely passing nearby a customer facility does not enable us to actually provide service to the customer. We estimate that there are 6.9 million commercial office buildings in the United States, and that around 2.3 million of those buildings are located in the cities where XO operates fiber ring. However, those 2.3 million buildings are unreachable, regardless of how close they are to the MF ring, unless they are physically connected to it. Today, our MF Rings connect to only 2,164 buildings, or **less than 1%** of the potential market.

17. The construction of laterals to connect office buildings to the XO network is extremely difficult, time consuming and costly, even when adding buildings to our MF Rings that are located in close proximity to our MF Rings. The average XO building entry is 500 feet long and on average costs **$141,000** in outside plant construction and building access plus **$79,000** for the associated electronics, totaling **$220,000 per building** assuming no significant space conditioning or internal end user wiring problems. It is important to realize that CLECs have no absolute right to build into the complexes at which customers reside. We must negotiate private Right-of-Way ("ROW") licenses and building access agreements, which may or may not be available at economic prices and depending on the location of the building. Additionally municipal franchises may need to be negotiated. Often permits are required for trenching, and sometimes rezoning is necessary, both of which are uncertain prospects. Unless these hurdles are crossed — and many times they cannot be — we simply are unable to construct that lateral regardless of customer demand or desires. For example, XO has faced recurring seasonal construction moratoriums imposed by municipalities during the winter months, construction bans in historic districts, multi-year construction bans in recently renovated city streets, building owner opposition and requirements to use city owned/operated conduit systems with limited access. In such instances, the ILEC loop facilities are the only route into the building and constitute an absolute monopoly bottleneck facility.

18. In addition to the capital cost of construction, the building of laterals is very time consuming. The time required to obtain all of the necessary legal clearances and then actually construct the lateral is a minimum of **4 to 6 months,** but can take much longer than that. Customers with moderate telecommunications requirements, such as the small- and medium-sized businesses that typically utilize DS-1 level access, normally are unable and/or unwilling to wait such a long time for the delivery of services.

19. The concerns and issues that XO has experienced in deploying its own loops are consistent with the Federal Communications Commission's (Commission's) findings in the *TRO* that competitive LECs "face extremely high economic and operational barriers" in deploying DS-1 loops. *Triennial Review Order* ¶ 325. The Commission also correctly recognized that DS-1 level customers pose significantly different economic characteristics from that of large enterprise customers and their general resistance to long term contracts. Taken together, the Commission determined that these factors make it "economically infeasible" for competitive LECs to deploy DS-1 loops. *Id.*

20. Due to the extraordinary cost of constructing laterals, XO's current policy is not to add a building to its network unless customer demand at that location exceeds at least 3 DS-3s of capacity.

The following Table 1 highlights the high cost of building laterals and that such builds are not financially justified until at least 3 DS-3 of capacity are under contract.

Table 1

Cash Flow Analysis (24-Month Present Values)

Number of DS-3 Installs in Month 1 (no DS-3 installs in Months 2 through 24)

		1.0	1.5	2.0	2.5	3.0
Revenue per DS-3 Per Month	$1,000	($204,900)	($197,100)	($189,300)	($181,500)	($173,600)
	$2,000	($188,300)	($172,200)	($156,100)	($140,000)	($123,900)
	$3,000	($171,700)	($147,300)	($123,000)	($98,600)	($74,200)
	$4,000	($155,200)	($122,500)	($89,800)	($57,100)	($24,500)
	$5,000	($138,600)	($97,600)	($56,700)	($15,700)	$25,300
	$6,000	($122,000)	($72,800)	($23,500)	$25,700	$75,000

- $220,000 of fiber cost (based on the average length of XO's laterals -- 500')
- NPV over 24 months

XO utilizes a careful screening process to decide whether the investment in lateral construction is warranted. A high-level estimate of construction and electronics costs is developed and used to perform an Internal Rate of Return analysis against the revenue commitment the customer is willing to make. The customer revenue commitment is defined as the Non-Recurring Charge (NRC), if any, plus the Monthly Recurring Charge (MRC) times the number of months the customer is willing to commit to by signing a term contract. Regardless of potential future revenue, no decision to build is made unless a signed customer contract is presented by the XO Sales team. In our experience, relatively few buildings survive such scrutiny, and "building adds" are the exception, not the rule. One thing can be said for sure, it would almost never make sense to construct a lateral to add a building to the XO network simply to add customers with DS-1 level demand.

21. As I explained above, it almost never is economic for XO to construct its own wireline DS-1 loop facilities. It is also worth noting that the same holds true for other CLECs as well. Numerous CLECs such as AT&T, WorldCom, Nuvox, NewSouth and KMC have said so

under oath in prior filings in these proceedings. XO's experience is consistent with these declarations. Because of limited building presence from other CLECs, we rarely have been able to purchase DS-1 and DS-3 loop facilities from other CLECs. This is true of all of our markets across the nation. Indeed, we found that CLECs offer DS-1 and DS-3 loops on a wholesale basis to **fewer than 5 percent** of the buildings that XO seeks to serve.

IV. WIRELESS TECHNOLOGY IS NOT WIDELY AVAILABLE AS A LOOP SUBSTITUTE

22. ILECs have occasionally suggested that CLECs such as XO could use fixed wireless technology to connect to their customers. However, XO's experience is that wireless loop technology suffers from technical frailties and economic problems that preclude its use as a substitute for wireline UNE loops for the vast majority of our business customers.

23. XO is one of the nation's largest holders of fixed wireless spectrum. Indeed, we have invested nearly **$1 billion** in acquiring LMDS spectrum at the 28, 31 and 39 GHz frequencies, which in combination potentially covers 95 percent of the population of the 30 largest U.S. cities. We made this investment in the hope and expectation that we eventually will be able to use fixed wireless technology as a local loop substitute, and be able to connect many customer buildings directly to our landline network.

24. XO previously tried to deploy equipment in approximately 30 markets that would enable us to use our LMDS spectrum to self provision wireless local loops between our network and customer buildings. Despite our best efforts, the roll-out was a failure. We deployed and tested equipment from four leading manufacturers and none of it performed at a level required for commercial acceptance, forcing us to abandon our initial roll-out plan. However, we continue to look for ways to use our extensive spectrum assets to reach our customers directly. Consistent

with that desire, we have been testing point-to-multipoint fixed wireless technology in San Diego and Los Angeles.

25. The results of our testing show that we have made a sound investment, and that at some indeterminate future point, wireless loops likely will be able to function as substitute for more than 5 DS-1s or DS-3 local loops in some situations. However, it is very clear that widespread commercial deployment of wireless local loops will not occur in the near future. In addition, when it does happen, the wireless local loop solution will only be useful in isolated situations that are conducive to use of the technology.

26. It is notable that the two companies that made by far the most aggressive attempt to deploy and sell fixed wireless technology and bypass loop alternatives have both failed. The two companies were Teligent and Winstar, both of which invested hundreds of millions of dollars in failed efforts to deployed fixed microwave systems. They discovered that there are very real barriers to be overcome in making fixed microwave systems commercially practical.

27. Fixed microwave systems are only useful for short haul applications. They require a direct line of sight between the customer location and the provider's network node. Moreover, signal strength fades with distance and is further attenuated by precipitation. As a consequence, microwave systems are not usable at ranges of more than 1-5 miles, depending on topography.

28. Even where these problems can be overcome, the technology can work only where impediments to antenna placement can be overcome. As did Winstar and Teligent before us, XO has experienced severe problems in obtaining the rooftop rights in commercial office buildings necessary to place the antenna equipment required to provide service. Many building

owners simply refuse to provide roof access under any conditions, while others will do so only at prices that are plainly too high for us to provide service economically. Our models require that total rooftop cost be a very small percentage of monthly revenue, or the company does not earn a reasonable return on its investment. The past industry mistakes have set an unrealistic price point in the market place. The market has also been jaded by past promises about the value of having wireless sites developed on their property. This has created a situation where many owners are unwilling to provide access or are unrealistic about the value of the access. Similarly, our attempts to negotiate access to rooftops of ILEC central offices, so that we could connect antennas with our collocation equipment, have been unsuccessful in all but three states.

29. XO is moving ahead with its development and testing of a fixed wireless access product. We remain optimistic that a fixed wireless access alternative could offer real value to customers in the future. However, it is quite evident that we remain years away from any sort of potential widespread deployment, AND that fixed wireless will not provide a connectivity solution for the foreseeable future for the majority of our customer base that uses less than 5 DS-1s of capacity. Consequently, the potential future deployment of wireless loop technology does not currently reduce our essential need for cost-based wireline DS-1 loop UNEs from the ILECs.

V. CABLE TELEVISION FACILITIES CANNOT REPLACE DS-1 AND DS-3 UNE LOOPS

30. Some ILECs have suggested that CLECs could opt to use cable television systems for alternative DS-1 and DS-3 loop facilities. In our experience, that is just ILEC rhetoric. To my knowledge, no cable television company has ever offered to provide DS-1 and DS-3 level loops to XO over their cable television plant. That should not be surprising, since cable television systems simply were not designed to provide this type of service.

31. There is a substantial geographic incongruity between the build-out plans of most cable television companies and the needs of facilities-based CLECs such as XO. Our target customers are businesses, and our fiber optic backbones are primarily routed in and around business districts. By contrast, most cable television systems were designed and built first and foremost to serve residential customers in suburban areas. Thus, commonly the cable television systems do not really reach the customers to which XO needs to connect.

32. Even where cable television networks reach our business customers, the cable television network facilities typically lack the capacity to serve large numbers of business customers that require telecommunications and Internet services at DS-1 and higher speeds. While it is true that cable television systems often have been upgraded to support the provision of cable modem services, the design of the network commonly is such to support infrequent high-speed bursts of data to and from subscribers. This is much different than a system required to support the "always on" bandwidth demands of businesses. Our sense is that cable systems normally could not provide the service availability guarantees required by our business customers.

VI. XO DEPENDS UPON UNE INTEROFFICE TRANSPORT TO COMPLETE OUR NETWORK

33. Building backbone fiber optic transport facilities is an incredibly expensive undertaking. The costs of self-deploying transport facilities include collocation costs, the cost of fiber, the cost of physically deploying the fiber, the cost of electronics necessary to light the fiber, and the cost of obtaining right-of-way for the fiber deployment. The electronics that must be placed in a collocation arrangement to provide interoffice transport include fiber distribution (to terminate and cross connect the fiber facility), digital signal cross-connect panels (to cross-connect DS-1 and DS-3 signals), optical multiplexers, and power distribution equipment (*e.g.*, power filtering and fuses). The aggregate cost of deploying fiber for use as interoffice transport can vary

substantially based upon density and topography (*i.e.*, urban construction typically is more costly than rural deployment), XO has found that placing fiber underground can cost **$400,00 to 700,000**, while placing fiber on poles can cost **$42,000** per mile. The cost to build these fiber routes is a sunk cost, since the facility cannot be moved to another location should we decide to exit a market.

34. Constructing interoffice transport fiber facilities also is very time-consuming. While fiber can be built in rural areas at rates up to several miles per day, in the urban and suburban areas where XO usually provides service, we normally can build at a daily rate of **300 to 500 feet** per day, and **100 feet** per day within the city's business district. We estimate that it normally takes approximately **6 months** to obtain the rights-of-way, apply for collocation and equipment; and it takes an additional **3 months** to actually build the fiber, and install/test the equipment. Building a collocation usually takes more than 12 months and only then can XO build fiber into the central office. This aggregate delay of more than a year provides the ILECS with significant "first mover" advantages over us.

35. Given that extraordinary cost of constructing interoffice transport facilities, it simply is not economic to build unless we have accumulated a very large volume of traffic on a particular route. Specifically, XO has found that construction does not make economic sense until we accumulate a minimum of **9 to 12 DS-3s** of traffic on that route depending on the distance. Given than we have found that self deployment is not economically rationale until we have a minimum of **9 to 12 DS-3s** of traffic on a route, obviously it would *never* be economic for XO to self-deploy interoffice transport facilities simply to provide DS-1 level transport. XO has never constructed interoffice facilities simply to self provision transport at the DS-1 level, and I cannot imagine a situation in which we could do so economically.

36. Where we lack the traffic volumes required to construct our own interoffice facilities, XO must purchase interoffice transport facilities from other carriers. We are constantly looking for opportunities to purchase interoffice transport services from other CLECs. Of course, less than a decade into the development of local competition, no CLEC has constructed facilities on most interoffice routes in the country. Given the enormous time, effort and capital required, it will be many years before competitive carriers – even in the aggregate – replicate the coverage of ILEC networks. But even where CLECs have in fact self-deployed interoffice transmission facilities, it does not mean that they offer access to their networks to competing CLECs. Often times CLECs that self deploy size their networks for their own anticipated needs and simply do not have bandwidth to sell to others. Other times they may have extra capacity, but do not invest in the equipment or back office required to support a wholesale offering. When CLECs construct their backbone fiber networks, they initially deploy and operate an optical interface at a range of capacities. An OC-3 capacity circuit has the identical capacity as three DS-3 circuits, but the OC-3 and DS-3 circuits utilize differing technological interfaces to terminate. Thus, to offer a wholesale DS-3 service to other CLECs, a carrier must purchase, install and operate the additional electronic equipment (*i.e.*, multiplexers and de-multiplexers) required to channelize a DS-3 circuit within a larger OCn circuit, and deliver it on the DS-3 interface

37. Even when another CLEC has a wholesale DS-3 transport offering available on a route, it must be recognized that we incur significant additional costs when we elect to use it. Since such a third-party carrier rarely (if ever) can provide all of the routes we need in a metro area, electing to utilize a third-party carrier requires us to incur the cost of making and managing service arrangements with multiple suppliers. For example, since most CLECs have locations different from each other within a city, XO would have to build into the third-party carrier's location in order to bring traffic to the XO switch site. In addition, service quality becomes more

difficult to maintain; maintenance and repair in particular becomes more problematic. Moreover, we must establish and maintain a cross-connect between the collocation arrangements to access the service, which costs XO on average a couple of hundred dollars per month, per fiber pair. Finally, even if another CLEC is able and willing to sell interoffice transport services to another CLEC, it may not be willing to do so at affordable rates.

38. As I have explained, our decision to self-deploy interoffice facilities is driven by the demand for our services on a particular route. XO must expect that we will have at least **9 to 12 DS-3s** in traffic on that route in the near term to make construction economic. In my experience, other CLECs face the same hurdle. Thus, it should not be surprising that we see the construction of interoffice facilities by multiple CLECs only on the very densest traffic routes. A prime example are routes between two ILEC access tandems. A second example would be a route in a Top 50 MSA market between two ILEC central offices, where both such offices serve very large concentrations of business lines (more than approximately 50,000 VGE business lines on each end). By contrast, where the ILEC central office on either end of the route serves relatively few business lines (approximately 25,000 VGE), competitive supply of interoffice transport facilities is rare.

39. I cannot emphasize strongly enough that the decision whether to self provision interoffice transport facilities – and the availability of competitive supply of such interoffice facilities – is inherently and exclusively a route-specific determination. The decision of whether to construct interoffice facilities is *route-specific* and is driven by the *density of business traffic on a particular route*. Whether there is or will be a competitive supplier of interoffice facilities is not a function of a metro area, an MSA or even a density zone. In each of those cases, you are likely to find a mix of routes where competitive supply can exist and those where it cannot.

40. XO is a facilities-based CLEC, and we strongly prefer to use our own facilities. But due to the economic realities discussed above, very often that just is not possible, thus requiring us to purchase interoffice transport from the ILECs. Simply put, our ability to deliver competitive telecommunications services depends upon our ability to continue obtaining ILEC transport facilities on those routes at economic, cost-based rates.

VII. ILEC SPECIAL ACCESS SERVICES ARE NOT AN ECONOMIC SUBSTITUTE FOR HIGH-CAPACITY UNE LOOPS AND TRANSPORT

41. CLECs are entitled to purchase DS-1 and DS-3 level Special Access services out of current ILEC tariffs. However, such DS-1 and DS-3 Special Access services commonly are priced much higher than comparable UNEs. That should not be a surprise, since entirely different standards apply to how the prices for each are established. Most Special Access services are subject to pricing flexibility and as a practical matter can be priced however high the ILECs wish to price them. By contrast, UNE prices are established by the state commissions in accordance with FCC-prescribed TELRIC costing principles. Accordingly, UNE prices are set at something approaching the cost incurred by ILECs in providing the facilities, while it is reported that the ILECs' profit margin on their Special Access service has increased on average from **8.25%** in 1996 to over **40%** at present as a result of price increases.

42. The differential in the pricing of Special Access services as compared to UNEs is a very significant factor for XO and other CLECs. I have attached a chart, **Attachment B**, which shows a variety of ILEC pricing plans currently available to XO for DS-1 and DS-3 level Special Access channel terminations in representative states. The chart also states the amount that we currently pay for DS-1 and DS-3 UNE loops in the corresponding states. As the attachment shows, even under term and volume commitment plans, XO commonly must pay **20% to 300%** more to purchase connections to buildings as DS-1 and DS-3 Special Access versus DS-1 and DS-

3 UNEs respectively. Further, term and volume commitment plans require XO to continue to purchase circuits for the **entire** period of the plan or face steep early termination penalties, thus greatly restricting XO's ability to take advantage of the best term and volume discounts offered by many ILECs. For example, if XO signs a customer up to a two year term contract for DS-1 services, but is required to purchase the underlying DS-1 circuit from the ILEC for a period of 5 years in order to get the best monthly price possible, it does not make economic sense for XO to commit to the 5-year term plan when its revenue stream to cover the cost of the circuit is only guaranteed for two years. In order to have the unrestricted ability to disconnect DS-1 and DS-3 loops and mirror its underlying end user customer commitments comparable to that enjoyed in the purchase of UNEs, XO must pay up to **600%** more for such Special Access circuits than for UNEs, as evidenced in Attachment B.

43. The exorbitant pricing of Special Access services has tremendous adverse and anticompetitive consequences. As I described above, XO simply must purchase ILEC facilities to connect to the vast majority of our business customers. The cost of these facilities is by far the largest direct cost we incur in serving such customers. Indeed, the cost of leasing a local loop for XO's various DS-1 products ranges from **54% to 93%** of our direct cost to serve our DS-1 service customers. Given the prevalent use of ILEC loop facilities to supplement our network, all such loop costs must be recovered from our customers in XO's charges. Since, as a practical matter, we must undercut ILEC retail prices to succeed, we operate on extremely thin margins. Our analysis shows that if we were required to replace DS-1 and DS-3 UNE loops with Special Access services across the board, our margin on our DS-1 and DS-3 based services would be completely wiped out. Indeed, the price increase required to yield a profit would cause us either to raise our retail prices above ILEC rate levels, a competitively unsustainable position, or more likely to abandon service where costs would not permit us to compete on price. This would make

new sales difficult if not impossible, and our existing customer base would quickly be lost to attrition. The business model for serving businesses with ILEC facilities would simply be unsustainable. Replacing our existing UNE transport services would have similarly severe adverse consequences. This too would usurp our ability to price our services competitively as compared to ILEC service offerings.

44. Several ILECs have contended that CLECs already rely primarily on Special Access to deliver their services. I cannot speak for other CLECs, but I can report without reservation that this ILEC suggestion is untrue with respect to XO, the nation's largest CLEC. To the extent that XO purchases DS-1 and DS-3 circuits from ILECs to serve our local service end user customers, we do so primarily through the use of UNEs, not Special Access. Indeed, less than 25 percent[1] of the DS-1 circuits purchased by XO from the ILECs are Special Access; conversely more than **75%** of such DS-1 loops are purchased as UNEs. Similarly, only **23%** of our DS-3 circuits have been purchased as Special Access.

45. Nonetheless, it is worth explaining why XO would order DS-1 or DS-3 Special Access from ILECs for use as local loops. There are several reasons. First, XO often has been forced to order Special Access because ILECs refused to "construct" facilities, including the installation of line cards or other minor electronic components. Verizon in particular adopted this anticompetitive "no facilities available" policy as a means of compelling CLECs to order Special Access in place of UNEs. Second, historically ILECs were not required to combine UNEs, and consequently CLECs that wished to use ILEC facilities to serve end users out of an ILEC central office where they were not collocated were forced to order such facilities as Special Access. Even

[1] The percentage of Special Access circuits does not reflect Special Access circuits that are subject to pending requests by XO that the relevant ILEC convert them to UNE pricing or disconnect them, nor does it include circuits that are required by law to be ordered as Special Access.

upon reinstatement of the FCC's UNE combinations rules, the ILECs were intransigent in permitting CLECs to order such combinations, known as EELs. Third, the ILECs have been dilatory with regard to converting Special Access circuits to stand alone UNEs. When requesting conversion from Special Access to UNE/EEL, XO has experienced endless negotiations and foot dragging, delayed conversion requests, requirements for circuits to be disconnected and reconnected, threats from the ILECs to impose exorbitant conversion charges, and overly long provisioning intervals. Fourth, we are required to order Special Access for certain circuits that are not eligible for UNE treatment (*e.g.* to order loop/transport combinations (EELs), the circuits must meet certain local usage tests under XO's interconnection agreements with most ILECs). Fifth, the ILECs historically prohibited commingling of access services and UNEs on the same facilities to serve an end user customer, thus posing yet another barrier to CLECs ordering UNEs.

46. Just to provide one example among many, XO's attempt over a 12-month period beginning in 2002 to convert more than 1000 DS-1 Special Access circuits (consisting solely of a channel termination) to UNE loops was thwarted due to BellSouth's insistence that the circuits be disconnected and reconnected, and that XO pay per-circuit conversion charges that were 30 times higher than BellSouth's allegedly "cost-based" rates for conversion of Special Access circuits consisting of a channel termination and interoffice transport to EELs.

47. XO's experience is that ILECs have continued to engage in these anti-competitive practices designed to prevent CLECs from ordering UNEs, or converting Special Access circuits to UNEs. Verizon continues to impose its "no facilities" policy on CLECs, refusing to recognize that the FCC's Routine Network Modifications ("RNM") requirements are self-effectuating, and insisting that CLECs must amend their interconnection agreements to include new RNM non-recurring charges that would double-recover costs already included in

TELRIC-based UNE rates. Similarly, notwithstanding the FCC's self-effectuating prohibition on unnecessary charges to convert Special Access to UNEs, XO continues to face ILEC imposition of such charges. For example, XO is currently embroiled in a dispute with BellSouth over that ILEC's insistence that it may impose a per-circuit charge related to conversion of DS-1 Special Access circuits to UNEs that is roughly equivalent to the non-recurring charge for the underlying Special Access circuit. In addition, many ILECs, including Verizon, continue to impose minimum monthly service commitments on all Special Access circuits so that CLECs must wait a minimum of **90 days** before converting a DS-1 Special Access circuit to UNE pricing (and a minimum of one year before converting a DS-3 Special Access circuit to UNE rates). The ILEC's processes to convert Special Access circuits to UNE's are both cumbersome and time consuming. For example, SBC, Verizon and BellSouth require that XO must place two orders (a disconnect for the existing circuit and a new circuit order) to convert a Special Access circuit to a UNE circuit. For large conversions, the conversion activities are typically coordinated as a project, and the ILEC's then commit through negotiations the number of circuits that will be worked per day. In addition, strict volume limitations restrict the number of Special Access circuits that can be converted to UNEs within a given timeframe. For example, with regard to a current XO DS-1 conversion request, Verizon will only allow XO to convert 5 to 8 circuits per LATA from Special Access to UNE pricing each day.

48. Notably, in an effort to further minimize its reliance on Special Access, XO has sought to implement the TRO's requirements regarding commingling and new EEL criteria by amending our interconnection agreements with ILECs. After failing to engage in any substantive negotiations with XO to implement a *TRO* amendment, Verizon filed for consolidated arbitrations across the country with virtually every CLEC with which it had an interconnection agreement. Shortly after the D.C. Circuit issued its *USTA II* decision in early March, Verizon determined that

it would be in its best interest to put the entire arbitration process on hold and sought abeyance orders from the relevant state commissions. XO and other CLECs opposed Verizon's abeyance motions as they related to issues unaffected by the *USTA II* decision, such as the *TRO*'s commingling, EEL certification, and RNM requirements. These CLECs requested that the affected state commissions bifurcate the arbitrations so that the parties could resolve such issues. Verizon, not surprisingly, has vehemently opposed this effort by XO and other CLECs, thus attempting to preserve further its ability to engage in anticompetitive policies that force CLECs to order and maintain high-capacity circuits as Special Access.

49. I must observe that there is no reason to believe that ILECs will reduce Special Access rates in the foreseeable future to be more closely aligned with cost-based UNE prices. Indeed, the market evidence is that the reverse is true. Over the past two months, several ILECs have filed for major, across the board increases in Special Access rates. In addition, ever since UNE rules were vacated by the D.C. Circuit last March, XO has observed reluctance by the major ILECs to negotiate meaningful commercial contracts as directed by the FCC. Thus, what we are observing in the real world is a steady increase in Special Access pricing, despite the fact that ILECs already are realizing incredible profit margins averaging **40%** or more on the service.

50. The ILEC determination to drive Special Access prices through the roof should not be surprising. They know what I discussed earlier in my Declaration, *i.e.*, that XO and other CLECs rely upon the availability of ILEC transport and high-capacity loop facilities to connect to customers, and that we must be able to recover all ILEC loop charges in our pricing to our customers. Thus, if our only option is to purchase Special Access services, the ILECs can inflate our cost of service substantially — and create a classic "cost/price squeeze." Whereas the availability of cost-based UNEs as an alternative previously provided CLECs an option to avoid

being caught in the squeeze, the elimination of UNEs (or even the prospect of it) provides an incentive and an opportunity for ILECs to raise Special Access prices to uneconomic levels. One must recognize that the ILECs profit more by CLECs exiting the market than they do by CLECs purchasing their Special Access services.

51. Finally, I understand that ILECs have suggested that pervasive use of Special Access by CMRS carriers is powerful evidence that wireline CLECs such as XO do not require the use of UNEs. The differences between the business of CMRS carriers and wireline CLECs are fundamental and too numerous to go through here. But one key distinction is worth mentioning in the context of the XO's petition. CMRS carriers do *not* use ILEC Special Access services as loop facilities to connect to end user customers. Their use of Special Access service is limited to interoffice transport, backhaul and entrance facilities. CMRS carriers use their own wireless technology to provide a "loop" connection to the end user. Thus, the experience of CMRS providers is fundamentally different, and largely irrelevant, to the question of whether XO's ability to provide service is impaired without access to cost-based ILEC UNE loops.

52. Thus, while XO utilizes DS-1 and DS-3 Special Access facilities, it does not do so by choice. We strongly prefer DS-1 and DS-3 UNEs and have consistently tried to order loop facilities as UNEs, and convert them to UNEs where we have been forced by ILEC restrictions to order them first as Special Access. Indeed, the evidence is clear. If XO were compelled to order all of its DS-1 and DS-3 loop facilities as Special Access, our existing integrated voice and data services offered to small and medium-sized customers would be rendered uneconomic, and our ability to offer service to off-net customers would end.

SUMMARY

53. The availability of DS-1 and DS-3 UNE loops and transport is essential to XO's ability to serve many thousands of small- and medium-sized business customers. ILEC Special Access is not an economically feasible alternative because Special Access rates are priced far above cost already and increasing steadily. Importantly, these conditions hold true virtually universally across the nation, without regard to market or location. Unless the FCC quickly acts to ensure that we are able to continue obtaining cost-based DS-1 and DS-3 UNE loops and transport on an uninterrupted basis, XO — the nation's largest CLEC — simply will not be able to provide competitive telecommunications services to small and medium business customers in most areas.

Wil Tirado
Director of Transport Architecture
XO Communications, Inc.

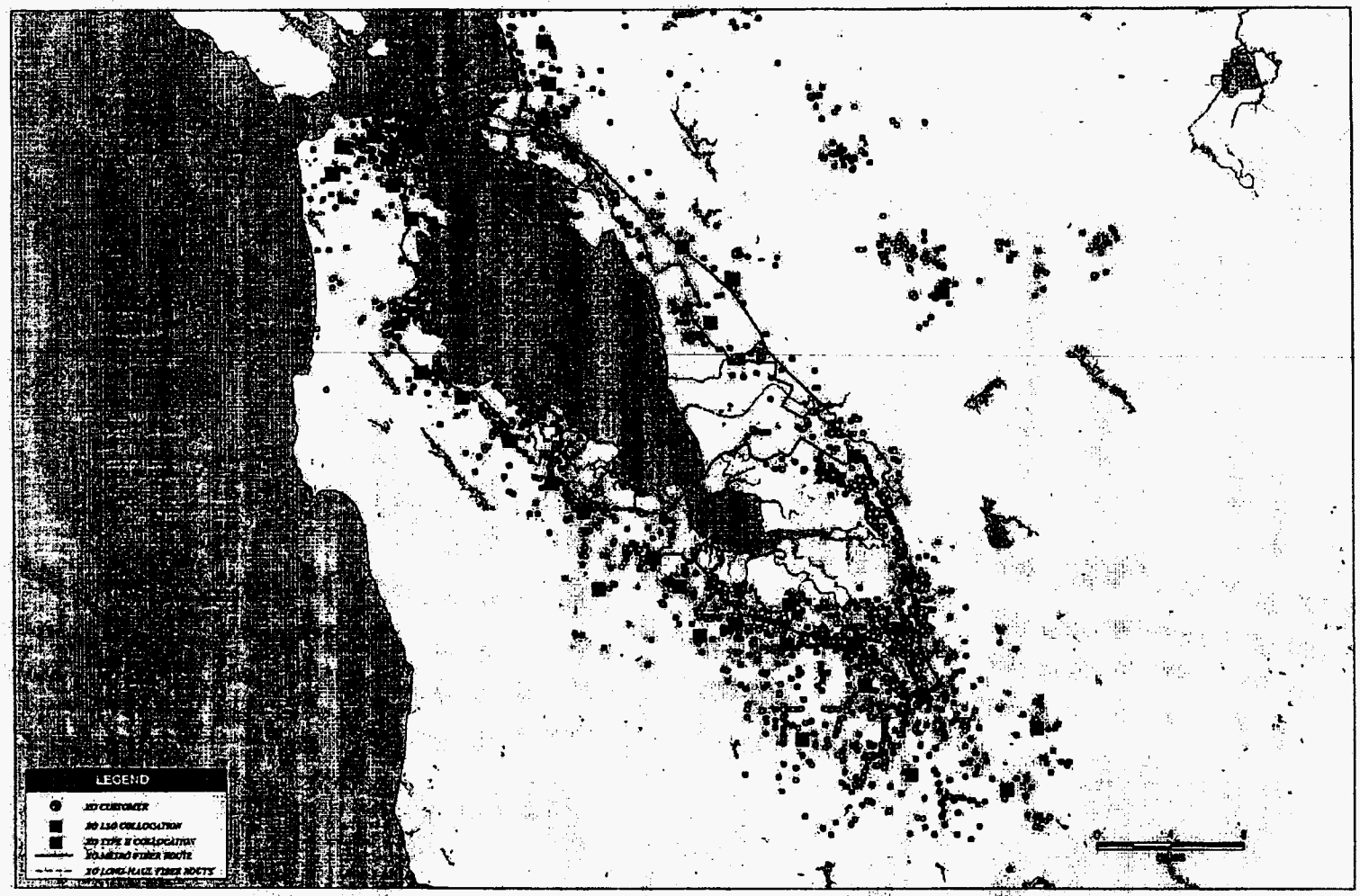
October 1, 2004

ATTACHMENT A

XO Communications

San Francisco

9-2004



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ATTACHMENT B

DS-1 and DS-3 Examples: Special Access v. UNE Rate Comparison

RBOC	State	Special Access: Month to Month	Special Access: 2 Year Term Plan	Special Access: 5 Year Term Plan	UNE	% Special Access Greater than UNE: Month to Month	% Special Access Greater than UNE: 2 Year Term Plan	% Special Access Greater than UNE: 5 Year Term Plan
[redacted]								
Bell South	Florida	$ 168.00	$ 126.00	$ 123.00	$ 70.74	137%	78%	74%
SBC	Texas	$ 215.00	$ 145.00	$ 92.00	$ 76.96	179%	88%	20%
Verizon(East)	New York	$ 193.99	$ 184.29	$ 145.49	$ 83.50	132%	121%	74%
SBC	Illinois	$ 255.00	$ 152.00	$ 93.00	$ 61.56	314%	147%	51%
Qwest	Washington	$ 132.25	$ 120.74	$ 105.80	$ 68.86	92%	75%	54%
[redacted]								
Bell South	Florida	$ 2,300.00	$ 1,730.00	$ 1,580.00	$ 386.88	494%	347%	308%
SBC	Texas	$ 1,850.00	$ 1,250.00	$ 975.00	$ 665.49	178%	88%	47%
Verizon(East)	New York	$ 2,541.00	$ 2,413.95	$ 1,651.65	$ 801.75	217%	201%	106%
SBC	Illinois	$ 2,370.00	$ 2,370.00	$ 960.00	$ 335.73	606%	606%	186%
Qwest	Washington	$ 2,200.00	$ 1,700.00	$ 1,500.00	$ 745.93	195%	128%	101%

Notes:
Rates are Monthly Recurring Charge
Channel Termination rate element only
Rates are MSA Zone 1