

Second, abrogating the contract tariffs would be contrary to the public interest because it would discriminate against customers that elected not to make term commitments in order to receive greater discounts. As the Commission found in the *Triennial Review Order*, when it declined to apply fresh look to special access contracts to enable CLECs to convert from special access to UNEs:

Competitive LECs that entered into long-term special access contracts benefited from term discount arrangements which allowed for lower costs. It may be unfair for these carriers to completely avoid costs they knowingly agreed to shoulder. Indeed, it would put them in a far better position than those competitive LECs that chose to avoid early termination provisions, and to select shorter contract periods with higher prices.

Triennial Review Order, ¶ 699.

For the same reasons, allowing customers to terminate special access contracts if the Commission reinitializes special access rates or withdraws pricing flexibility would be “disruptive to the marketplace, and ultimately inconsistent with the public interest.” *Id.*, ¶ 694. In fact, permitting customers to abrogate discount plans would simply motivate ILECs to offer less aggressive discounts going forward, out of concern that customers will be permitted to walk away from their agreements before the ILEC has recovered the costs of providing service. After all, as the Commission has recognized, early termination liabilities are “a valid *quid pro quo* for the rate reductions included in long-term plans.” *Ryder Communications, Inc. v. AT&T Corp.*, 18 FCC Rcd 13603 ¶ 33 (2003). Without termination liabilities, discounts are harder to justify from the carrier’s perspective.

Far from supporting their cause, the cases cited by the proponents of fresh look confirm that such relief is inappropriate here. In *Western Union Telegraph Company v. FCC*, the D.C. Circuit cautioned that the FCC “has the power to prescribe a change in contract rates” *only* when

“it finds [the rates] to be unlawful,” and that the agency can “modify other provisions of private contracts,” *only* if doing so “is necessary to serve the public interest.” 815 F.2d 1495, 1501 (D.C. Cir. 1987) (upholding the Commission’s authority to *increase* special access rates that it found to be unreasonably low, notwithstanding a settlement agreement between competitive long distance carriers and AT&T and local telephone companies which prevented those companies from raising rates). Here, special access rates (both overall and for individual services) have been decreasing and discount plans and contract tariffs have resulted in significant savings for customers. Consequently, it is inconceivable that a court would affirm a decision to permit customers to abrogate voluntarily-entered discount plans and contract tariffs.

In the *INTELSAT Direct Access Order* cited by PAETEC, the FCC *declined* to impose fresh look. In that case, various parties asked the Commission to nullify their long-term contracts with Comsat (a vendor of INTELSAT space segment capacity) to enable them to gain direct access to INTELSAT. After noting the presence of strong competition from both satellite competitors and fiber optic cable providers, the Commission found that the contracts had not “‘locked up’ the market to such an extent that they created unreasonable barriers to competition.” *INTELSAT Direct Access Order*, ¶¶ 122-124. The Commission also determined that nullifying the contracts would not serve the public interest because the customers had freely entered into these contracts in order to obtain discounted rates and because Commission had changed its rules specifically to allow carriers to enter into such contracts. *Id.* ¶ 126. Both determinations hold true here: in the special access context, there is strong competition from fiber-based CLECs, cable companies, and fixed wireless providers, *Lew Decl.* ¶¶ 10-12, 34, the Commission adopted pricing flexibility to permit special access contract tariffs, and customers willingly entered into such arrangements to obtain discounts.

The two other orders cited by the commenters are equally unavailing because they involved the grant of new rights or the emergence of competitive alternatives that did not exist at the time of contract formation. For example, in the *Expanded Interconnection Order*, the FCC granted fresh look to enable customers to take advantage of a new, mandatory collocation policy. *Expanded Interconnection with Local Telephone Company Facilities*, 9 FCC Rcd 5154, ¶ 197-208 (1994). Likewise, the FCC granted CMRS providers fresh look rights upon the adoption of the 1996 Act to give providers the same opportunities as new entrants under the new mutual compensation regime. *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499, ¶ 1095 (1996). Here, in contrast, customers already have the option to select from a wide range of offerings from the ILEC (including shorter- and longer-term deals, month-to-month rates, or contract tariffs) and from a multitude of other competitive sources. Accordingly, there is no basis for imposing a fresh look requirement.

VII. **THE VERIZON/MCI MERGER WILL HAVE NO ADVERSE EFFECT ON SPECIAL ACCESS RATES**

Several commenters contend that the Verizon/MCI and SBC/AT&T mergers will have a negative effect on special access pricing because they will eliminate major competitors from the special access market, the merged companies assertedly will agree not to compete in each other's regions or will offer discounts in-region structured so that they are available only to the other company, and the merged entities supposedly will be able to engineer a price squeeze. *See, e.g., T-Mobile 11; BT Americas 7-12; Broadwing/SAVVIS 29-31*. Others claim that Verizon offers large discounts only to prevent MCI and AT&T from expanding their networks, and the mergers will eliminate these incentives. *Time Warner 19-20*. None of these claims has merit.

First, as Verizon explained in detail in its reply in the Verizon/MCI merger proceeding, the areas in which Verizon and MCI facilities overlap are large urban areas that attract substantial competition. There is at least one additional competitor in 89 percent of the wire centers with overlapping fiber, and an average of nearly six competitors per wire center. See Joint Opposition of Verizon Communications Inc. and MCI, Inc. To Petitions to Deny and Reply to Comments 32, *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, WC Docket No. 05-75 (May 24, 2005) (“Verizon Merger Reply”). Further, 80 percent of MCI’s lit buildings are concentrated in only 111 of the [BEGIN VERIZON CONFIDENTIAL] [END VERIZON CONFIDENTIAL] Verizon wire centers with MCI-lit buildings, and each of those 111 wire centers already has an average of ten other competitive fiber networks. *Id.* 32-33. The fact that MCI has deployed fiber to these locations proves that other competing carriers can do so as well. Therefore, the elimination of MCI in Verizon’s region will not harm competition.

Second, the suggestion that Verizon and SBC will agree not to compete outside their regions defies logic and is inconsistent with current behavior. A major rationale behind the Verizon/MCI merger is to compete on a more global and national scale. It would not make economic sense for Verizon to acquire MCI and then abandon all of the customers throughout SBC’s region. Moreover, SBC and Verizon already compete in numerous services, and Verizon has been expanding its facilities in SBC’s region. For example, Verizon Wireless and Cingular (SBC’s and BellSouth’s joint wireless affiliate) compete throughout the country, and Verizon has deployed its 3G wireless broadband service (EVDO) in several of the major metropolitan areas in SBC’s territory.²⁴ In addition, Verizon competes for enterprise customers in 17 areas in which

²⁴ See Verizon Wireless, *Wireless Internet Broadband Access* (available at

SBC is the ILEC, has extended its optical fiber network in Dallas, and provides its VoiceWing VoIP services in area codes in 11 of SBC's 13 states.²⁵ Verizon also operates an IP/MPLS backbone with routers in such SBC cities as Chicago, Dallas-Fort Worth, Los Angeles, and San Francisco.²⁶ Moreover, SBC is actively competing in Verizon's territory, giving Verizon added incentive to be an aggressive competitor. SBC Telecom provides enterprise services in Albany; Baltimore; Bergen-Passaic, NJ; Boston; Charlotte; Middlesex, NJ; Nassau-Suffolk, NY; New York City; Newark; Norfolk, VA; Philadelphia; Tampa; and Washington, DC.²⁷ *Id.* 23-24. Further, if SBC and Verizon agreed not to compete in each other's regions, the end result would be that both companies would lose business to companies able to provide services throughout both areas. *Id.* 22-24.

Third, claims that Verizon will be able to engage in a price squeeze are unsupported and contradicted by the evidence. Both the Commission and the courts have found that existing regulatory safeguards effectively protect against price squeezes. For example, in the *Access Charge Reform Order*, the Commission held that, regardless of any incentive to engage in price

<http://www.verizonwireless.com/b2c/mobileoptions/broadband/index.jsp>).

²⁵ See Verizon Merger Reply, Reply Declaration of Eric Bruno ¶ 15. The 11 states are: California, Connecticut, Illinois, Indiana, Kansas, Missouri, Michigan, Ohio, Oklahoma, Texas, and Wisconsin.

²⁶ See Verizon News Release, Verizon Plugs In New National Broadband Network (Apr. 14, 2004).

²⁷ See New Paradigm Resources Group, *CLEC Report 2005*, Ch. 6 – SBC Telecom at 7-8 (19th ed. 2005) (“*CLEC Report 2005*”). Indeed, SBC has recently won a major contract with the American Red Cross in Washington, DC. See SBC News Release, SBC Communications Announces Five-Year, \$59.7 Million Contract with the American Red Cross (Apr. 18, 2005).

squeezes, it “ha[d] ... adequate safeguards against such conduct.” First Report and Order, *Access Charge Reform*, 12 FCC Rcd 15982, ¶ 278 (1997) (“*Access Charge Reform Order*”).

The Commission further explained that the “requirement that incumbent LECs offer services at tariffed rates . . . reduces the risk of a price squeeze to the extent that an affiliate’s long distance prices would have to exceed their cost for tariffed services.” *Id.* ¶ 279. Similarly, in the seminal *Town of Concord* case, then-Judge Breyer held that, “where [an alleged monopolist’s] prices are regulated at both the primary and secondary levels,” a price squeeze is not only significantly less likely to occur, but even when it does occur “is not ordinarily exclusionary.” *Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 22 (1st Cir. 1990). Moreover, if Verizon were able to engage in a price squeeze, it could have begun doing so when it received Section 271 authority. Yet, the Commission has never made such a finding and Verizon has shown that this is not the case. Verizon Merger Reply 42-43.

Not only is Verizon unable to engage in a price squeeze generally, the specific locations where MCI has deployed fiber in Verizon’s region make such behavior impossible. MCI has put in its own facilities in those areas with the highest concentration of special access demand, as have many other competitors. If Verizon were to attempt to engage in a price squeeze by raising special access prices to uneconomic levels, there are numerous competitors waiting to step into its place and under-price it. *Id.* 44-45. Moreover, such an increase in price would attract additional entrants who would either use existing facilities abandoned by those who exited the market or deploy new ones.

Finally, competition will ensure that Verizon will continue to offer attractive discount plans even after the merger with MCI. Failing to do so would result in a rapid and substantial loss of business to current competitors while encouraging entry by additional carriers.

Moreover, the majority of Verizon's discount plans are term discounts, not volume discounts, so the volume of services purchased need not govern the level of discount. Verizon Merger Reply 37-40.

VIII. CONCLUSION

The Commission should further relax regulation of special access rates as discussed above and in Verizon's opening comments.

Respectfully submitted,

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July 29, 2005



A



**REPLY COMMENTS OF VERIZON
WC DOCKET NO. 05-25
JULY 29, 2005**

**ATTACHMENT A
REPLY DECLARATION OF W. TAYLOR**

REDACTED – FOR PUBLIC INSPECTION

and supracompetitive rates of return. These parties, however, did not file substantive information regarding the scope of their own networks or their use of ILEC special access services. Instead, they recite the familiar litany of service-specific ARMIS rates of return and costs, isolated snapshots of ILEC special access tariff prices, and inapt comparisons of tariffed special access prices with TELRIC-based rates or allegedly competitive benchmark long-haul transport prices.

3. In response, I show below that none of this data is a valid indicator of ILEC market power for special access services. First, ARMIS rate of return and expense data were not designed to be used for pricing individual services, fundamentally because fully-distributed costs bear no necessary relationship with economic costs.

4. Second, increases in tariffed DS1 and DS3 prices for some discrete services eligible for pricing flexibility do not imply the presence of market power because while some tariffed rates may increase, the number and size of discount tariffs offered to customers and accepted by customers increased. As a result, the effective price paid went down. Looking at average revenue (i) per circuit, (ii) per channel termination or (iii) per channel mile (for DS1 and DS3 services separately), we see (for Verizon data) that customers generally³ paid less per circuit, per channel termination or per channel mile over the 1999-2004 time period. In addition, there is no reason to believe that decades of regulated special access prices would result in prices necessarily near the competitive market level. Hence, when pricing flexibility is permitted, we may observe price increases as well as decreases as prices are permitted to move toward a competitive market level.

5. Third, the fact that special access prices exceed TELRIC-based prices does not indicate the presence of market power. TELRIC was not designed to produce the retail prices that would prevail in competitive markets. Moreover, TELRIC is not a valid measure of the forward-looking economic costs that Verizon incurs to provide service. And, finally, even if UNE prices were based on the ILEC's forward-looking economic costs, prices in a competitive market would not be driven to those levels because all firms — incumbents and entrants alike — must price

³ See Taylor Declaration, Table 8. The exception is DS1 channel mileage for which real average revenue per channel mile was approximately constant, rising at 0.3 percent per year.

services above incremental cost to recover the substantial fixed costs of providing network telephone services.

6. Finally, Dr. Wilkie's comparison of short-haul tariffed DS3 mileage prices per mile with the average price per mile from long-haul, DS3 transport offerings is economically and statistically flawed. Fundamentally, the economic reason the price of long-haul transport is lower per mile than that of short-haul transport is that the costs are lower: because the volume of demand is greater on the long-haul POP-to-POP routes, transport is provided on highly multiplexed circuits at much greater bandwidth and much lower cost per mile.

7. In summary, the data provided in the industry's response to the *NPRM* show no evidence that "Phase II pricing flexibility for special access has produced substantial and sustained price increases in those MSAs for which Phase II pricing flexibility was granted."⁴ The story is the opposite. In my initial declaration, I showed that average revenue per voice-grade-equivalent line, measured across all special access services, fell at 16.6 percent per year in real terms since pricing flexibility began in 2001, which is faster than during the pre-pricing flexibility period and much faster than required by the price cap index.⁵ Focusing the analysis on individual services, DS1 and DS3 circuit prices fell in real terms (at 4.28% and 3.41% respectively) since 2001, as did DS1 and DS3 channel termination prices and DS1 and DS3 channel mileage prices.⁶ Finally, for channel terminations and channel mileage subject to pricing flexibility, DS1 and DS3 circuit prices fell in real terms over the 1999-2004 period, as did DS1 and DS3 channel terminations and DS3 channel mileage.⁷

8. How can some prices for specific services increase during the pricing flexibility period and yet average revenue per voice-grade-equivalent line, per DS1 or DS3 circuit or per DS1 or

⁴ *NPRM*, ¶76.

⁵ Taylor Declaration, Table 1 and Figure 3.

⁶ Taylor Declaration: Tables 5, 6 and 7 presented results in nominal terms. In real terms, averaged over price cap and price flex services and over month-to-month and discount plans, DS1 channel termination and channel mileage prices fell at 6.14 and 1.12 percent annually (respectively), while DS3 channel termination and channel mileage prices fell at 1.85 and 4.56 percent annually (respectively) from 2001 to 2004. See Taylor Attachment 2.

⁷ Taylor Declaration, Table 8. Again, the only element whose price increased in real terms over the 1999-2004 period was DS1 channel mileage, whose price fell at 2.9% per year from 1999-2001 and rose at 2.54% from 2001-2004, averaging 0.3 percent over the entire period.

DS3 channel termination or channel mile fall so significantly during the same period? The answer is obvious and familiar to those who studied the effects of competition on long distance pricing in the U.S. prior to the entry of the RBOCs. The primary effect of competition for special access services has been to reduce the average revenue per unit (voice-grade equivalent line, DS1 channel termination, DS3 channel mileage, etc.) that customers pay by introducing new (tariffed) discount plans rather than by reducing the tariffed prices of existing services and plans. As described in Mr. Lew's declaration (and in SBC's and BellSouth's comments), discount plans have proliferated for both retail and wholesale customers, and most (between 75 and 90 percent of) customers now purchase services from these discount tariffs that offer discounts ranging from 40 to 70 percent compared with month-to-month rates.⁸ This massive shift of customers to discounted tariffs reduces the prices customers pay for the services they buy, but no individual tariff rate is reduced, and, in fact, some tariff rates (such as basic month-to-month rates) have actually increased. The net effect for customers, however, is lower prices.

9. In these comments, I first examine each of the four assertions about special access prices listed above and assess the implications of the data with respect to the alleged persistence of ILEC market power for special access services and the success or failure of the FCC's pricing flexibility plan. I then respond to three theoretical points raised by commenters: (i) the economic validity of the Commission's pricing flexibility triggers, (ii) the costs and benefits of the ubiquitous ability of ILECs to reduce prices by responding to RFPs and negotiating commercial contracts, and (iii) the need to simplify the special access rate structure and price cap mechanism for those services which remain subject to price regulation.

III. Special Access Rates of Return and Changes in Tariff Prices Do Not Signal the Presence of Market Power

10. Most of the data relied upon by proponents of increased regulation falls into one of two categories: (i) allegedly excessive and increasing accounting rates of return for special access services based on ARMIS data and (ii) changes in actual tariff prices for special access rate elements. For the ARMIS rates of return data, ETI updates their previous calculations,⁹ but neither they nor any other party addresses the pertinent question: why should investment and

⁸ See Lew Declaration at ¶62, SBC Comments at 22, BellSouth Comments at pp. 17-19.

⁹ Gately Declaration at ¶12.

expense data derived from fully-distributed cost allocations using factors unrelated to current demand and cost quantities have any relevance to the issues in this case. And while several parties show where the prices of individual special access rate elements have increased during this period, none take into account the effect of new offerings of highly discounted tariffs. As discussed above, while some tariffed special access prices may have increased during this period, the prices customers actually pay — as measured by average revenue per unit of output — fell during this period for Verizon and for ILECs on average.

A. ARMIS Expenses and Investment Do Not Produce Measures of Economic Costs or Profit.

11. Several parties use data supplied by ILECs in their ARMIS reports to calculate profits and expenses for special access services, despite the fact that these data were not designed or intended for use in setting or assessing prices for individual special access services. Such calculations with these data are economically meaningless, as Dr. Kahn and I stated some years ago:

High or increasing rates of return calculated using regulatory cost assignments for interstate special access services do not in themselves indicate excessive economic earnings reflecting the exercise of market power. Indeed, regulatory rates of return for geographic subsets of single services in multi-product, multi-geographic firms bear no relationship with economic profits and thus can serve no useful purpose in determining whether pricing flexibility has or has not been excessively permissive. ILECs are integrated multi-regional firms and rely on an integrated regional management structure employing the regional physical and human resources to provide a multiplicity of services. The cost allocations required render such a calculation meaningless.¹⁰

And the Commission, in the *NPRM*, essentially agreed, stating that: “high or increasing rates of return calculated using regulatory cost assignments for special access services do not in themselves indicate the exercise of monopoly power.”¹¹

¹⁰ Declaration of Alfred E. Kahn and William E. Taylor On Behalf of BellSouth Corporation, Qwest Corporation, SBC Communications, Inc., and Verizon in FCC RM No. 10593, December 2, 2002, (“Kahn-Taylor”) at 7.

¹¹ In the Matter of Special Access Rates for Price Cap Local Exchange Carriers and AT&T Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, WC Docket No. 05-25 and RM-10593, Order and Notice of Proposed Rulemaking, released January 31, 2005 (“NPRM”), ¶ 129, citing Franklin M. Fisher

1. **ARMIS Rates of Return**

12. Several commenters argue that ILECs retain and exercise market power for special access services based in part on calculations from ARMIS data that show special access rates of return to exceed 11.25 percent and to be increasing since pricing flexibility was authorized. For example, Ad Hoc cites a paper by Economics and Technology, Inc. that calculates ARMIS-based rates of return and updates those numbers through 2004.¹² Other commenters cite the Ad Hoc arguments.¹³ Time Warner and others cite a paper by Noel Uri and Paul Zimmerman, which concludes that price cap LECs have market power in supplying special access services, based, in part, on the observation in Table 1 that ARMIS rates of return by study area are higher than 11.25 percent and increasing.¹⁴ The important question regarding these data is not whether they are up-to-date or pertain to every study area, but rather why these parties and their economists persist in citing data that have no relevance for assessing the prices and appropriate regulatory regime for ILEC special access services. As I (and many other economists, including those frequently representing AT&T) have explained many times, the problem with these claims is that they rely on accounting rates of return to reach conclusions about ILEC economic profits and thus whether ILECs possess market power. As discussed in my Initial Declaration, there is no economic justification for such an approach, and the Commission has on several occasions rebuffed the use of these data for setting prices.¹⁵

13. In addition to the economists' generic condemnation of using accounting rates of return to measure market power, there are specific reasons why rates of return calculated from ARMIS data bear no relationship with economic profits. ARMIS costs and investment for special access

& John J. McGowan, "On the Misuse of Accounting Rates of Return to Infer Monopoly Profits," 73 *American Economic Review* (1983), at 83.

¹² Comments of the Ad Hoc Telecommunications Users Committee at 16; Attachment A: "Competition in Access Markets: Reality or Illusion," August 2004, Economics and Technology, Inc. ("Competition in Access Markets"); and Gately Declaration at ¶¶8-12.

¹³ See, e.g., XO at 8, ATX et. al. at 8, Nextel at 11.

¹⁴ Time Warner at 15, Wilkie Declaration at 11. See Noel D. Uri and Paul R. Zimmerman, "Market Power and the Deregulation of Special Access Service by the Federal Communications Commission," *Information & Communications Technology Law*, Vol. 13, No. 2, 2004 ("Uri-Zimmerman").

¹⁵ Taylor Declaration at 41-42.

services are derived from the Part 32 Uniform System of Accounts by a multi-stage process that allocates costs and investment between regulated and nonregulated services, between regulated interstate and regulated intrastate services and among regulated interstate services and access rate elements. Costs and investment in these processes are assigned to the various categories on bases other than cost-causation, and by the time costs and investment for individual interstate special access rate elements are produced, the results bear no relationship with economic costs. Tellingly, when required to set prices for unbundled network elements by the Telecommunications Act of 1996, the Commission rejected ILEC accounting costs as opposed to forward-looking economic costs as a basis for pricing.

14. Ad Hoc gives three reasons why accounting rates of return based on ARMIS cost, revenue and investment assignments imply that pricing flexibility was a policy error.¹⁶ First, Ad Hoc asserts that ARMIS and the Uniform System of Accounts were developed jointly by the ILECs, so that the ILECs cannot now claim that they do not reflect reality. From an economist's perspective, whether ARMIS accounting reflects reality is not at issue. On the contrary, the level and change in the prices that a competitive market would produce cannot be assessed by looking at accounting costs and investment, however accurately those accounts reflect the actual expenditures of particular firms. This is true for reported special access returns and for the reported low returns earned on switched access services. Both returns are tainted by the use of allocated accounting costs and investments.

15. Second, Ad Hoc asserts that the trends in ARMIS rates of return are significant, even if the levels of those rates of return are not, because minor misallocations of costs under the rules would have similar effects each year. On the contrary, assignments of costs to particular services that differ from forward-looking economic costs can have very different effects in different years, depending on the algorithm used to assign those costs. For example, the historical relationship between switched and special access demand growth reversed during this period when special access demand grew, and switched access demand fell. In such cases, costs allocated to regulated services, to interstate services or to interstate special access services can diverge more and more from economic costs over time.

¹⁶ Ad Hoc Comments at pp. 29-31.

16. Third, Ad Hoc cites positions that a particular ILEC expert witness took regarding ARMIS data that it characterizes as irreconcilable and self-serving. A simple reading of the examples cited shows no such thing. Where ARMIS-based costs for UNEs are discussed, it is in the context of the relationship between prices and *book* costs. Cited statements that — except for shared and common costs — ARMIS costs are straightforward to calculate and accurate refer explicitly to the calculation of *book* costs for switched or special access elements. When asked about the relationship between prices and *book* costs, ARMIS costs are a perfectly respectable answer to that fundamentally uneconomic question. Nothing in these statements even appears to suggest that ARMIS costs assigned to particular categories of services approximate *economic* costs or that ARMIS rates of return approximate *economic* profits.

2. ARMIS Expenses

17. Ad Hoc raises two further arguments involving ARMIS cost and investment data. First, Ad Hoc asserts that costs are likely over-allocated to special access, rather than the reverse, because interstate special access net investment is about a third of interstate investment, while special access loops are only about 2.5 percent of all end user lines.¹⁷ Implicit in this assertion is the notion that investment per loop for special access circuits and end user common lines ought to be about the same. On the contrary, there are significant technical differences in special access circuits and common line loops; the former are “designed” circuits and include equipment to condition, channelize and multiplex the circuit which are not part of an end user common line loop. The fact that ARMIS does not assign investment to interstate services in proportion to loops does not, by itself, suggest that investment or expenses are overallocated or underallocated to interstate special access.

18. Second, Ad Hoc argues that ARMIS special access operating expenses per voice-grade equivalent line are falling faster than ARMIS revenue per voice-grade equivalent line.¹⁸ While Ad Hoc’s confirmation that ARMIS special access revenue per voice-grade equivalent line is falling during the pricing flexibility period is useful, its comparison of operating expenses and revenue per voice-grade equivalent line is not. The assignment of operating expenses to regulated services, to interstate services and finally to special access services follows no

¹⁷ Gately Declaration at ¶¶13-14, updating Competition in Access Markets at 33-34.

¹⁸ Gately Declaration at ¶15.

economically valid rule,¹⁹ and Figure 3.4 in Ms. Gately's declaration does not show a widening gap between revenue per voice-grade equivalent line and *economic* cost per voice-grade equivalent line.

3. Revenue Allocation

19. The assignment of revenue to specific interstate services in ARMIS is less ambiguous than the assignment of costs because the causal connection between a unit of output of a service and a dollar of revenue is more direct than between the unit of output and a dollar of costs.²⁰ Nonetheless, the treatment of DSL revenue in ARMIS accounting does impart a serious bias to average revenue per voice-grade equivalent calculations that do not adjust for the inclusion of DSL revenue. Ad Hoc asserts that adjustment for DSL revenue would only reduce calculated rates of return by a few percentage points.²¹ However, since DSL revenue is increasing so rapidly over time, improperly including it in interstate special access revenue results in a serious overestimate of the growth of interstate special access revenues (and revenues per voice-grade equivalent). Figure 1 shows the fraction of ARMIS interstate special access revenue that represents DSL revenue.²² The effect on the annual growth rate of real special access revenue per voice-grade equivalent line is about 165 percent: based on ARMIS Report 43-01, the annual decline in real revenue per voice grade equivalent for 2001-2004 was 10.0 percent, compared with 16.6 percent once DSL revenues were removed.

B. Rates in Phase II MSAs

¹⁹ One might think (incorrectly) that operating expenses can be easily assigned on a cost-causative basis. Consider, however, how network maintenance costs should be assigned to particular network services. Which services are charged when a pole or section of conduit is replaced?

²⁰ Note that this generalization does not apply to services that are bought as a package. Like ARMIS cost allocations, revenue allocations from packages to services may accurately follow reasonable accounting rules, and the results may be useful for some purposes, but they cannot be used to draw valid economic conclusions of any kind.

²¹ Competition in Access Markets, p. 29, n. 55.

²² DSL revenue recorded in ARMIS was \$0 in 2001 because conditions imposed on the Bell Atlantic-GTE merger required that DSL be provided through an affiliate, so that little or no DSL revenue was reported in ARMIS that year.

Figure 1

[BEGIN VERIZON PROPRIETARY]

[END VERIZON PROPRIETARY]

20. A number of parties cite increases in specific special access tariff rate elements as evidence that ILECs retain market power and have used pricing flexibility to exploit that power.²³ That complaint is incorrect as a matter of economics because the prices paid by customers have not increased — in fact, by all measures they have decreased — as ILECs have introduced and promoted discount plans and customers have adopted them. For example, Verizon offers special access discount plans under FCC 11 for DS1 and DS3 services with discounts up to 40 percent off of month-to-month prices. Verizon also offers commercially-negotiated contract tariffs with additional discounts up to 40 percent (depending on the service offering) above the discounts they already receive under Verizon's basic pricing plans.²⁴ These plans are quite popular; about 85 percent of Verizon's revenues for special access services purchased by wholesale customers are through such plans.²⁵

²³ Global Crossing, Time-Warner 17, cites Uri-Zimmerman, AT&T

²⁴ Lew Declaration at ¶70.

²⁵ Lew Declaration at ¶62.

21. Uri-Zimmerman²⁶ and others conclude that special access prices are increasing, particularly for services subject to pricing flexibility. Uri-Zimmerman examine individual special access components—such as DS1 channel terminations and DS1 channel mileage—to determine whether those prices have increased during the pricing flexibility period. However, their approach ignores the proliferation of price discounts that are commonplace in the market. If the basic tariffed price of a 36-month DS1 channel termination increases, Uri-Zimmerman interpret that increase as an exercise of market power. However, if at the same time, the ILEC introduces a new 36-month DS1 channel termination tariff having a 40 percent discount off the month-to-month rates instead of a 10 percent discount, Uri-Zimmerman's measure of prices does not register that change. Customers, however, *do* register that change, and they are better off, paying lower prices after an increase in tariffed prices combined with the introduction of new discounted contract tariffs.

22. The calculations in my Declaration measure average revenue per unit (per voice-grade equivalent line, per DS1 or DS3 circuit, per DS1 or DS1 channel termination or channel mile), which averages together the prices that all customers actually pay; *i.e.*, the month-to-month prices for some customers and the highly discounted prices for others. The fact that each of these average revenue per unit calculations falls over time indicates that market forces are making special access customers better off.

23. Two further pieces of evidence contradict the Uri-Zimmerman interpretation of tariff changes. First, there is direct evidence of the effect of actual competitor activity on ILEC prices: Verizon's experience in using contract tariffs to respond, frequently unsuccessfully, to competitors' offerings is described in Section II of Mr. Bruno's Declaration. Notably, competitive forces do not appear to compel across-the-board reductions in month-to-month rates or existing discount plans but rather result in new contract tariffs and total billed revenue contracts. The effect of these offerings on prices paid by customers is not captured by changes in existing month-to-month and discount plan prices.

24. Second, there appears to be general agreement that demand for special access services continues to grow. Such growth in the presence of falling levels of average revenue per unit of output implies that competitive forces are constraining prices. Otherwise, an outward shift in the

²⁶ Uri-Zimmerman at 168.

demand for special access services would be expected to induce higher equilibrium prices. Note that average revenue per unit of output is the relevant measure of price in this exercise: even if the tariffed price of a service increases, if customers are offered a discount plan or contract tariff that lowers the price of the services demanded, the customer effectively pays a lower price. The fact that customer demand continues to increase is a strong signal that customers have moved towards discount plans and contract tariffs and faced lower prices. The effect of these changes has been in an increase in consumer welfare.

25. A final problem with these comparisons of price changes between price cap and pricing flexibility MSAs is that there is no economic reason to assume that the price cap level of prices represents a competitive market price for individual special access services. Thus, ATX, *et. al.* is incorrect in its claim that there is “no theoretical basis for permitting any price increase based on a showing of competition.”²⁷ In some cases, current prices may exceed competitive market levels, and competition will force those prices downward. In other cases, current prices may be below competitive market levels, and the ability to raise prices under pricing flexibility would allow prices to rise toward the competitive market level. In such cases, a price increase would not represent an exercise of market power because market power is explicitly the ability to raise and maintain price profitably *above the competitive market level* by a small but significant non-transitory amount.²⁸

C. Comparison with TELRIC is Irrelevant

26. Several commenters observe that special access prices exceed the level of TELRIC-based UNE prices and suggest that the difference is a measure of ILEC market power.²⁹ The comparison is inapt for several reasons.

²⁷ Comments of ATX Communications Services, Inc, Bridgecom International, Inc., Broadview Networks, Inc., Pac-West Telecomm, Inc., and U.S. Telepacific Corp. D/B/A Telepacific Communications (“ATX, *et. al.*”) at 34.

²⁸ “The term ‘market power’ refers to the ability of a firm ... to raise price above the competitive level without losing so many sales so rapidly that the price increase is unprofitable and must be rescinded.” W.M. Landes and R.A. Posner, “Market Power in Antitrust Cases,” *Harvard Law Review*, 95 (1981) at 937, emphasis supplied.

²⁹ See WilTel at 17, Nextel at 16 and PAETEC at 11.

27. First, TELRIC is not a valid measure of an ILEC's forward-looking economic costs of service from either a theoretical or practical viewpoint. In theory, TELRIC-based prices are not valid approximations to the prices that would prevail in a competitive market because no firm can price its services at each instant at the lowest cost attainable by a hypothetical perfectly efficient firm optimized to serve the entire market with a network containing nothing but the newest and most efficient technology. The clearest examples of theoretical problems with such a standard are switching and cable routes. The TELRIC omniscient standard – as interpreted by some parties – calculates costs in an optimized network where demand volumes are known and fixed. In this interpretation, the TELRIC-standard network reflects purchases of switches with optimal capacity at the outset, which avoids the need to purchase expensive add-on capacity to serve additional demand in the future. Similarly, in the TELRIC world envisioned by some parties, cable routes are always served by a single sheath of the optimal size cable, instead of by parallel cables of smaller size installed to meet demand as it materializes.

28. From a practical viewpoint, TELRIC is the wrong standard for assessing whether special access prices approximate competitive market prices because existing TELRIC-based rates do not account for the high cost of capital and high depreciation rates that would be required to account for the (assumed) short life of the current generation of technology. Similarly, no implementation of TELRIC properly accounts for the option value implied by the sunk investment costs of an ILEC network element. That is, the CLEC can buy current technology on a month-to-month basis as a UNE, while the ILEC must invest sunk costs in providing the facilities. One look at competitive market prices in the personal computer market — comparing high rental prices with low purchase prices — shows that market prices in markets subject to rapid and uncertain technological change include a considerable premium for such short-term flexibility.

29. Finally, whether TELRIC or some other measure of incremental cost is used, it is incorrect to infer the presence of market power from the difference between price and incremental cost. In markets where the technology is characterized by a high proportion of fixed costs, incremental costs alone do not determine competitive market prices. One need look no further for an example than U.S. long distance markets. Dr. Kahn and I performed a calculation that showed that in 1998 — three years after the market was deemed sufficiently competitive to

remove the services from price cap regulation — AT&T's residential interstate domestic direct-dial customers were charged prices that embodied a markup of price over incremental cost that ranged from 82 to 185 percent, depending mainly on whether marketing expenses were treated as incremental costs.³⁰

D. Comparison with T-Mobile's Competitive Benchmark is Irrelevant

30. T-Mobile³¹ uses what it argues are competitive DS3 and OC3 level transport prices as a benchmark against which to compare Verizon's tariffed DS3 interoffice transport rates in an attempt to assess the competitiveness of Verizon's special access rates. There are several economic and econometric errors with this analysis, and the conclusion that Verizon possesses market power for DS3 and OC3 transport is not supported by the data.

1. Summary

31. Dr. Wilkie attempts to assess the competitiveness of ILEC interstate special access services by comparing prices prevailing for long-haul transport to Verizon's interoffice transport (special access) prices in New York.³² His source for the allegedly competitive benchmark data is Telegeography Bandwidth Pricing Database Service, which Telegeography characterizes as "the first market-based source for long-haul capacity pricing information designed for both carriers and enterprise bandwidth buyers."³³ For the Verizon DS3 ten mile interoffice transport service, he uses a tariffed rate that reflects a 36-month commitment discount of 10%.³⁴ As noted above, this is a substantially smaller discount than other discounts available to customers. The logic of his comparison is that "[i]f the special access prices are not comparable, then we can reject the hypothesis that special access prices approximate competitive prices."³⁵

³⁰ Kahn-Taylor at pp. 10-11.

³¹ Wilkie Declaration at Section III.

³² Wilkie Declaration at pp. 5-11.

³³ See http://www.telegeography.com/products/bandwidth_pricing/index.php.

³⁴ See Verizon Tariff F.C.C No. 11, § 31.7.9 1st Revised Page 31-150 showing a fixed monthly rate of \$701.25 and a per mile rate of \$131.78. For ten miles the DS3 interoffice transport price is \$2,019.

³⁵ Wilkie Declaration p. 6.

32. Dr. Wilkie uses the Telegeography data to obtain actual single route monthly prices quoted in contracts that were negotiated for long-haul services in locations where, he asserts, there are several competitive suppliers. He then uses these data as a benchmark to calculate what he characterizes as a competitive market price per mile for DS3 or OC-3 transport by assuming that

$$\text{Circuit Price} = F + [c \times \text{miles}]$$

where F is the mileage-insensitive component of price and c is the price per mile. Dividing both sides by miles, he gets

$$\text{Price per mile} = c + F \times [1 / \text{miles}].$$

Taking a sample of allegedly competitive contract prices and associated mileage for long-haul transport, he estimates c and F from an ordinary least squares regression to be

$$\text{Price/mile} = 1.77 + [223 \times (1/\text{miles})].$$

33. Using this equation, he forecasts the competitive price of a DS3 circuit of ten miles to be \$240.60 [= 10 × (1.77 + 223*(1/10))]. He then asserts that the competitive price of any point-to-point DS3 interoffice transport circuit of ten miles should be about \$240.60. He compares this price to Verizon New York's tariffed monthly price for a DS3 interoffice transport circuit of ten miles, which is \$1,817, if no other discounts that are available to customers are taken into account. The large difference between Verizon's price and the forecast price from the benchmark data leads him to conclude that "the special access price of transport is significantly higher than the competitive benchmark produced by the regression analysis" and, on that basis, that "special access prices are supra-competitive" and that they "should be regulated to prevent supra-competitive pricing."³⁶

2. Prices for long-haul services cannot be used to infer competitive characteristics for short-haul services

34. The economic flaw in Dr. Wilkie's analysis is the assumption that the economic and technological characteristics of long-haul transport are similar to those of the shorter-haul special access transport. In particular, the cost per mile on longer-haul routes is likely to be much less

³⁶ Wilkie Declaration p. 9.

than the cost per mile on shorter-haul routes for several reasons. As recognized by Dr. Wilkie (at 8), there are economies of scale on long-haul routes that cannot be realized on shorter-haul routes. In order to provide point to point connections—whether long-haul or short-haul—a telecommunications firm must incur a significant amount of fixed costs that do not vary with distance. For example, the costs of DS_n multiplexing and fiber optical carrier systems (OCs) vary based on the level of demand on given routes, and these costs are independent of route distance. For high capacity routes—whether long or short—higher capacity OCs make economic sense and as the distances of those routes increase, the cost per mile decreases because these fixed (distance insensitive) costs are spread across greater distances. We would thus expect to observe the cost per mile to be lower on longer-haul routes.

35. Dr. Wilkie asserts that his method controls for economies of scale of this type because he estimates a model that relates DS3 price per mile to distance (plus a constant term). The database he uses, however, contains primarily prices of long-haul capacity, not short-haul capacity. According to the Telegeography web page describing the Bandwidth Pricing Database Service, the shortest route appears to be the Los Angeles to San Diego route (approximately 100 miles), with most of the routes being much greater than 100 miles. Dr. Wilkie incorrectly assumes that the relationship between price per mile and distance in the longer-haul business is the same (or similar enough) as the relationship between price per mile and distance in the shorter-haul business. However, the relationships between cost per mile and mileage on the longer haul and shorter haul routes are likely to differ because (i) demand is likely to be greater on the longer-haul routes, thus permitting a more economically efficient (lower cost) use of telecommunication resources to transport the traffic and (ii) costs of support structures and rights-of-way may be lower on long-haul routes than on short-haul routes.

36. For example, take two identical customers that require a DS3 level transport. Customer 1 requires DS3 level special access interoffice transport between a wire center in Poughkeepsie to the nearest IXC POP. Customer 2 requires long-haul DS3 level transport between a wire center in Manhattan and a wire center in Los Angeles. Because of high demand volumes between New York and Los Angeles, Customer 2's DS3 transport would actually be multiplexed with the demands of other customers and carried from Manhattan to Los Angeles on higher capacity optical carrier systems such as OC-48 or OC-192. For the Poughkeepsie route, however,