<u>**Table of Long Term Debt Rating For Selected Telecommunications Companies (November 2002) by Nationally Recognized Statistical Rating Organizations (NRSROs)**</u>

(Non-BOC Companies Falling Outside Verizon Criteria Shown In Bold)

Primus Telecommunications, Inc.	CCC+	NO		Caa2	NO		N/A		
Business Telecom, lnc.	N/A			N/A			NIA		
Americatel Corporation	NIA			N/A			NIA		
ITC DeltaCom Communications, Inc	D	NO		Ca	NO		NIA		
Talk America Inc (f/k/a) talk com Holding Corp	N/A			NIA			NIA		
Evercom Systems, Inc	D	NO		Ca	NO	Negative	N/A		
General Communication, Inc (GCI Inc)	BB	NO	Negative	B2	NO		NIA		
Electric Lightwave, Inc	**NIA**			**Baa2**	**YES**		**BBB**	**YES**	
Teleglobe Group	NIA			C	NO		D	NO	
PT-I Long Distance, Inc. (ɔr Star . e ecommunications)	NIA			N/A			NIA		
F t O iti Inc [ratings for parent; France Telecom]	**BBB**	**YES**		**Baa3**	**Yes**		**BBB**	**YES**	
SNET America, Inc. N/A [ratings shown for parent SNET Corp.]	AA-	YES	stable	Aa3	YES	Negative	AA-	YES	
ALLTEL Communications. Inc	**A**	**YES**	**Negative**	**A2**	**YES**	**Stable**	**A**	**YES**	**Stable**
Level 3 Communications, LLC	**CCC**	NO		Caa3	NO		N/A		
Norlight Telecommunications Inc	N/A			N/A			NIA		
Lightyear Communications	N/A			N/A			NIA		
Working Assets Funding Services, Inc.	NIA			N/A			NIA		

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, **D.C. 20554**

In the Matter **of** Verizon Telephone Companies Tariff **FCC Nos. 1, 11, 14**, and **16**	))))))	**WC** Docket **No. 02-317**

DECLARATION OF BRADFORD CORNELL
ON BEHALF OF AT&T CORP.

I. BACKGROUND AND QUALIFICATIONS

1. My name is Bradford Cornell. I am a senior consultant to Charles River Associates (CRA), an international consulting firm. In my position as senior consultant, I advise business and legal clients on a range of financial economic issues. I am also a Professor of Finance and Director of the Bank of America Research Center at the Anderson Graduate School of Management at the University of California, Los Angeles (UCLA) Additionally, I have taught at the UCLA Law School.

2 I earned a master's degree in Statistics from Stanford University in 1974 and earned my doctorate in Financial Economics from Stanford in 1975 I have served as an editor of numerous journals relating to business and finance and have written more than 70 articles and two books on finance and securities markets

3 Prior to my affiliation with CRA, which began in March of 1999, I operated FinEcon, a financial economic consulting company, through which I also advised business and legal clients on financial economic issues. I have served as a

consultant and given testimony for both plaintiffs and defendants in a variety of securities, regulatory and commercial litigation

4 During my many years of experience as an expert witness and consultant, I have performed numerous analyses in matters involving telecommunications companies. For example, I have testified before state regulatory commissions in UNE cost proceedings and have testified before the FCC in an access charge rate of return proceeding I have also performed analyses of the broadband industry, have served as a special master in a dispute over the valuation of a Russian wireless franchise, and have evaluated the impact on ratepayers of the spin-off of a wireless subsidiary from a regional **Bell** operating company (RBOC) My background is described more fully in my ***curriculum** vitae*, which is attached as Exhibit 1

II. SCOPE OF OPINIONS AND ANALYSIS

5 Counsel for AT&T Corp. ("AT&T") have asked me to respond to assertions made in the Direct Case dated October 29, 2002 filed by Verizon Telephone Companies ("Verizon") regarding proposed modifications to the customer deposit provisions of Verizon's interstate access tariff. These modifications in part provide that Verizon would require advance payments or a security deposit in cash or a letter of credit if one or more events occurred.

6. These events are:

a. **A** customer's account balance has become past due in any two months out of any consecutive twelve-month period; [1]

[1] In the Matter of Verizon Telephone Companies, Tariff FCC Nos 1, 11, 14 and 16, WC Docket No 02-3 17, Direct Case of Verizon, October **29,** 2002 p **3,** n. **4**

b. A customer owes $250,000 or more to Verizon that is 30 days or more past due,[2]

c. The customer or its parent has initiated a voluntary receivership or bankruptcy proceeding, or an involuntary proceeding has been initiated against the customer or its parent,[3]

d. " . [S]enior debt securities of a customer or its parent are below investment grade;"[4] or

e. [T]he customer or its parent informs [Verizon] or publicly states that it is unable to pay its debts as such debts become due";[5]

f. "[T]he senior debt securities of a customer or its parent are rated at the lowest investment grade rating category by a nationally recognized statistical rating organization, and are put on review for a possible downgrade."[6]

7. Verizon's proposed tariff modifications also contain the following:

a. Verizon would pay interest of 18.25% per year on all security deposits held.[7]

b. "Under the advance payment plan, a customer would pay one month in advance for services, on a recurring basis, rather than paying two months'

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[2] *Ibid.*

[3] *Ibid.*

[4] *Ibid.*

[5] *Ibid.*

[6] *Ibid.*

[7] *Id.* at p. 24

worth of charges as a deposit."[8] Under this payment plan, Verizon is not obligated to pay interest on advance payments.[9]

c. For the security deposit option, Verizon will select the amount of the deposit, but, according to Verizon, the deposit would not exceed two months' estimated billings.[10]

d. Verizon's proposed tariff revisions would only allow a carrier ten days to comply with Verizon's finding that a security deposit was owed, and seven days to comply with Verizon's finding that an advance payment was owed.[11]

e. If Verizon requests a security deposit pursuant to any of the six criteria, it will return such deposit after the customer's written request if 1) "the customer's account balance has been paid in full;" 2) the customer no longer meets any of the six criteria for requiring such a deposit; and 3) the customer has not met any of the six criteria for at least one year.[12]

8. I find Verizon's proposed modifications to the customer deposit and advance payment provisions to be unreasonable and severely anticompetitive, for two

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[8] *Id.* at p. 4

[9] In the Matter of The Verizon Telephone Companies, Tariff FCC Nos. 1, 11, 14 and 16, WC Docket No. 02-317, FCC Order Adopted October 7, 2002, p. 3, ¶ 5.

[10] Verizon Direct Case, Exhibit A, p. A-27; ***See also*** In the Matter of The Verizon Telephone Companies, Tariff FCC Nos. 1, 11, 14 and 16, WC Docket No. 02-317, FCC Order Adopted October 7, 2002, p. 7, ¶ 18.

[11] *Id.* at p. 9, ¶ 24.

[12] *Id.* at p. 10, ¶ 28

primary reasons *First*, Verizon's tariff modifications, which provide it with far greater ability to demand security deposits from its customers, are entirely unnecessary. Although the telecommunications industry has certainly experienced stock market declines, and some competitive local exchange carriers and interexchange carriers have filed for bankruptcy, the impact of those factors on Verizon's bad debt expense has not been significant in relation to its revenues. Moreover, Verizon has provided no legitimate evidence showing that the recent increases in its uncollectible bad debt are permanent To the contrary, economic logic and historical evidence suggest that Verizon's bad debt expense is related to current economic conditions and is therefore cyclical. Further, even these cyclical increases in uncollectibles have had no significant impact on Verizon's profits for access services, which remain quite high. For these reasons, any changes to existing provisions on Verizon's ability to collect security deposits are unwarranted.

9. ***Second,*** even if Verizon needed to collect additional security deposits or advance payments, the triggers it has selected to determine which access customers must pay these deposits are set so low that the vast majority ofcarriers will be subject to security deposit or advance payment requirements, providing Verizon with significant discretion. That discretion is dangerous, because Verizon has strong incentives to use that discretion to favor its affiliated companies. By demanding large security deposits or advance payments from its access customers (but not its own long distance affiliate), Verizon can directly raise its rivals' costs, thereby providing Verizon's affiliates with a distinct competitive advantage. Additionally, unlike companies in competitive industries, Verizon's decisions about security deposits and advance payments are not disciplined by

the market, because Veriron's access customers generally cannot switch to another supplier Thus, there is virtually no check on Verizon's discretion, which, as noted, it has every economic incentive to abuse

10 Verizon has an unusual opportunity to discriminate against **IXCs** on behalf of its own long-distance affiliate because it has provided in its tariff that the creditworthiness of any customer can be determined by examining bond ratings of the customer or its parent Therefore, Verizon has provided that its long distance affiliate can be judged by the credit rating of its parent. Although under the Telecommunications Act the Verizon long distance affiliate is supposed to be viewed as separate from Verizon's other assets and credit[13], it in fact benefits enormously from Verizon's intangible assets—its brand name and reputation—in terms of being able to attract customers. This valuable benefit makes it difficult to assess the creditworthiness of Verizon's affiliate as if it were truly a stand-alone company. Thus, hypothetically, if one could properly value Verizon's long distance affiliate on a stand-alone basis without the benefit of Verizon's enormous reputational value, it would likely have a stand-alone credit rating less than that of Verizon's parent company or Verizon as a whole. In fact, as a relatively new company, Verizon's long-distance affiliate would be precisely the type of company for which Verizon would like to have a security deposit

A. Verizon Does Not Need To Collect Additional Security Deposits.

11 The Investigation Order in this proceeding required Verizon to demonstrate that its bad debt expense has increased because of some long-term trend,

[13] *See* 47 U.S.C.§272(b)(4).

rather than any short-term circumstance According to the FCC's Order adopted October 7, 2002, Verizon.

> shall...address whether the variation in uncollectible levels for 2000 and 2001 is merely a normal fluctuation in uncollectibles, which would be covered by the business risks anticipated to be endogenous to price caps, or whether it reflects some long term trend that warrants expanded security deposits and advance payments from customers meeting Verizon's proposed standards.[14]

Even though the FCC squarely puts the burden of proof on Verizon, Verizon has not addressed this issue in its Direct Case. It has not provided evidence showing that any increased level of uncollectibles is permanent, and it can only speculate as to the level of uncollectibles in the future.

12. First, there is no evidence that Verizon has experienced a permanent bad debt increase with respect to its access customers. Exhibit 2 shows annual uncollectible receivable expense for Verizon-East, Verizon-West, and ten other major LECs as a percentage of wholesale revenue. That data on its face does not show that Verizon as a whole has experienced any permanent increase in uncollectible accounts receivable. For example, Verizon-East's uncollectibles percentage was .38% in 1990, fell to 0.25% in 1991, but rose to .67% in 1994. By 1999, it had fallen to .35%. Verizon-West's uncollectibles percentage rose from 0.35% in 1990 to 0.91% in 1992. By 1996, it had fallen to 0 51%, but had risen again by 1999 to 1.05%. In 2000 and 2001, respectively, it had fallen again to 0.78% and 0 77%. As can be seen in Exhibit 2, increases in Verizon's uncollectibles percentage from 1990 through 1997 have also been followed at some point by decreases in the uncollectibles percentage. If in 1999, Verizon-West had used its doubling in percentage uncollectibles between 1996 and 1999 to argue that its

[14] Order at p. 6, ¶ 12

uncollectible receivables had increased permanently as a percentage of revenues, it would have been wrong. Likewise, if Verizon-East had argued in 1994 that uncollectible receivables as a percentage of revenues had increased permanently from their 1990 through 1992 levels, it would have been wrong. Recent fluctuations, like past fluctuations, are more than likely caused by normal changes in the business cycle or other short-term circumstances

13. In this regard, in comparison to other LECs, Verizon-East's 2001 uncollectible wholesale accounts receivable as a percentage of wholesale revenue was the second highest in the group at **1.36%** Verizon-West's 2001 uncollectible wholesale accounts receivable was only 0 77% However, the average uncollectibles of the group, excluding Verizon-East and Verizon-West, was somewhat lower than Verizon-West and far lower than Verizon-East, coming in at 0.61% The average for the group overall was 0 69%, still much lower than that experienced by Verizon-East in 2001. For the year 2000, the overall group average was 0.42%, and was also 0.37% without Verizon-East and Verizon-West. Thus, in 2001, Verizon-East was not experiencing uncollectible expenses from wholesale interstate long distance revenue that were consistent with bad debt losses experienced by other LECs.

14. Such evidence further discounts any assertion that Verizon is now subject to a permanent increase in the magnitude of its bad debt, simply because other LECs (and Verizon-West) have experienced lower levels of bad debt expense in the same time frame Verizon-East's recent relatively higher level of bad debt expense may be due to circumstances that it directly controls. For example, it may be less efficient at collecting bad debts once its customers default, or it may not be as skilled as other LECs in

identifying the customers that qualify for security deposits under the existing tariff provisions.

I5 Second, as a matter of practical economics, the revenues of the long-distance business derive from the phone calls made by business and consumer customers. From the point of view of the ILECs, their access revenues ultimately depend upon the dollar-generating calls made by these end user customers, even though IXCs are generally the direct purchasers of access services While the number of such IXCs purchasing access may expand and contract over time, the call-generating public remains the source of revenues. Consequently, for Verizon to demonstrate successfully that there has been a permanent increase in bad debts by its long-distance access customers, it would also have to show that the financial reliability of the IXC's own customers as a whole has permanently declined. There is simply no evidence that could support such an assertion The ability of IXC customers to pay their debts may vary over time in conjunction with business cycles, but there is no reason to believe that such customers in the aggregate have suffered permanent financial impairment.

16. Verizon, in part, grounds its need for higher security deposits and advance payments on an assertion that over the past two years unpaid access charge accounts receivable have increased because of companies that are now in bankruptcy. Even if this assertion was assumed to be true for argument's sake, bankruptcy losses — which arise from the current recession (and, in some cases, apparent fraud) — lead to the conclusion that, by definition, they will not be reoccurring in the long run. To the extent that the increase in uncollectible receivables arises from companies that have filed for bankruptcy, such an increased level is a temporary fluctuation.

17 Moreover, many of these bankrupt companies will more than likely cease to exist The customers that used them, however, will migrate the calls that terminate on the Verizon network to more viable companies. Given the downturn in the telecom industry, which Verizon has itself noted, the likelihood of new and financially unstable long distance companies now entering the business and handling these calls is low. The likelihood that long-distance customers will migrate to the financially more stable survivors, which will be more reliable in paying bills owed to Verizon, **is** high In short, as the business cycle eliminates the less efficient companies from the market, Verizon will likely have an ***easier,*** not a more difficult, time collecting its receivables in the future.

18. Lastly, even assuming some temporary increase in bad debt expense, it is difficult to understand why Verizon needs to collect additional security deposits or advance payments, given that its rates of return for its access services have remained high over the last several years, and are extremely high by virtually any standard. Verizon is an ILEC operating under price cap regulation. According to the most recent rate of return that the FCC determined to be reasonable for Verizon and other incumbent local exchange carriers, such a price cap carrier was expected to earn an interstate rate of return of about 11.25%.[15] However, Verizon (North + South + GTE) has earned returns on interstate access of 17.40% in 1999, 17.24% in 2000, and 17.08% in 2001. Verizon (excluding NYNEX) earned returns on interstate access of 20.72% in 1999, 21.46% in 2000, and 21.97% in 2001, despite increases in uncollectible accounts receivable in those years See Exhibit **3**

[15] This rate of return was set in 1990, and is therefore much higher than the rate of return that would equate to the current low interest rate environment.

19 Thus, during a period of time that it asserts is economically unstable and volatile for many of its access customers, Verizon has been earning well above expected returns on its investment. It seeks, however, to have its IXC access customers, which are also its interstate long-distance service competitors, bear at least a portion of its risk of uncollectible accounts receivable This is an inappropriate redistribution of risk. **As** a company subject to price cap regulation, Verizon bears the business risks associated with the potential for any excess profits that it could earn, and these business risks include the potential for uncollectible receivables

B. Verizon Has Discretion In Deciding From Which Carriers To Demand Security Deposits or Advance Payments. There Is No Serious Check To Prevent Verizon From Abusing That Discretion And To Retain Any Deposit For One Year After It Is No Longer Needed.

20. Even if Verizon had demonstrated that it needed to secure more of its access revenues with large deposits or advance payments, the method it proposes to determine when to demand such deposits or advance payments is very troubling and appears anticompetitive. First, it should be noted that, as described in its Direct Case, Verizon has complete discretion to decide whether security deposits or advance payments are needed once any of the six above-mentioned criteria are met. One major difference between security deposits and advance payments is that Verizon would owe interest (which it claims would be 18.25%)on security deposits, but states that it will not owe any interest on advance payments. It seems extremely unlikely that Venzon would decide to **pay** interest to a customer (particularly if the rate is, in fact, in excess of Verizon's interstate returns) if it could simply require advance payment equal to one month's estimated billing and thus speed **up** its collection cycle. Thus, it seems far more likely that in most cases, Verizon will elect to require an advance payment, and will not pay any

interest on that amount From the perspective of the customer, this advance payment is much like a security deposit, except that. when the customer's bond ratings do improve, any credit it receives for the advance payment will not be increased by interest that the monies would have otherwise earned

21 According to its Direct Case, Verizon will select which carriers must provide a security deposit or advance payment – whichever Verizon deems appropriate – based on six criteria. In this declaration, I principally examine two of the six criteria, relating to long-term bond ratings. Under its proposal, Verizon has authority to demand deposits where "the senior debt securities of a customer or its parent are below investment grade" or "the senior debt securities of a customer or its parent are rated at the lowest investment grade rating category by a nationally recognized statistical rating organization, and are put on review for a possible downgrade."[16]

22. AT&T has compiled the long-term bond ratings of the nation's largest IXCs (or a parent company) issued by the three credit rating agencies that Verizon proposes to use (Moody's, S&P, and Fitch)." The results of this compilation are striking. virtually *all* of the long distance carriers that are not affiliated with BOCs are very close to or already fall within Verizon's proposed long term bond rating triggers. Of the top ten carriers, only two, AT&T and Verizon's long distance affiliate, have long term bond ratings that do ***nor*** fall within the Verizon-defined triggers. Of the top 40 carriers, only *five* additional carriers (apart from BOC-affiliated companies) maintain investment grade ratings. Because a significant portion ofthe largest long distance

[16] Direct Case at 3-4 n.4 & Verizon FCC Tariff Nos. 1, 11, 14, and 16, § 2.4.1(A)(2)

[17] See Exhibit 4, attached hereto.

companies fail to meet the Verizon-defined criteria, it is evident that Verizon has provided itself with significant ability to demand security deposits from many of its customers and long distance rivals

23 The ability to determine which of its access customers must pay security deposits or advance payments has considerable potential for abuse This is a particularly sensitive issue because wholesale customers that are required to make deposits or payments are at a competitive disadvantage to those that are not required to do so

C. A Study Issued by Moody's Shows that Agency Ratings Overstate the Likelihood of Default in the Short Run

24 Moreover, Verizon's criteria appear far too broad. In its Direct Case, Verizon asserts that "'over 90% of all rated companies that have defaulted since 1983 were rated Ba3 [one of the highest "junk" grade ratings] or lower at the beginning of the year in which they defaulted."[18] This does not mean, however, that either a downgrade in a company's credit rating to below investment grade, or a low investment grade rating combined with a credit watch, implies that company is likely to default in the near future.

25. In a statistical review covering the period 1970 through 2001, Moody's itself shows that the one-year default rate on speculative-grade bonds was 10.22% for 2001, and this default rate was the second highest measured over the period 1970 through 2001[19] This reflects the fact that 2001 was a bad year for the U.S economy as a whole. The average default rate over the full period for speculative grade, i.e., below investment

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[18] Direct Case, p 10, quoting Moody's Investor Service, Rating Policy "Understanding Moody's Corporate Bond Ratings and Rating Process," at 9 (May 2002).

[19] Moody's Investor Service, Special Comment "Default & Recovery Rates of Corporate Bond Issuers A Statistical Review of Moody's Ratings Performance 1970-2001," at 33 (February 2002)

grade, bonds was much lower, 3 77% The average default rate over the period for investment grade bonds was 0 06%. Thus, although credit ratings can be useful over a longer time horizon in indicating the likelihood of default, the actual risk of default in any given year is low Thus, below investment grade agency ratings do not indicate a high likelihood of default in the short run. Consequently, the proposed revisions based on this factor are a further indication that Verizon is not assessing long-term economic conditions in the telecommunications industry in its efforts to implement new security deposit and advance payment practices.

26. Moreover, Verizon's discretion is particularly troubling for competition because it would provide Verizon with a direct ability to raise its rivals' costs. Verizon, like other ILECs, has its own long-distance affiliate. According to its Direct Case, Verizon has not demanded a security deposit from its own long distance affiliates.[20]

27. **As** an initial matter, and as discussed above, Verizon's conclusion that its own subsidiary would be creditworthy is immediately suspect. In theory, Verizon's IXC company is a fledgling startup, unsupported by either Verizon's profitable LECs or the Verizon parent. It is my understanding that Verizon's affiliate is required to compete on a stand-alone basis with other IXCs so as not to give it an unfair advantage in the ILEC's service territory. For example, as I understand it, under the Telecommunications Act, the affiliate may not obtain credit under any arrangement that would permit the affiliate's creditors to have recourse to Verizon's assets[21]

[20] Direct Case, Exh. A at **A-30.**

[21] *See* 47 U S.C.§272(b)(4)

28. According to Verizon's stated concerns, the affiliate is precisely the kind of company that poses significant credit risk. Verizon has not explained why it will not demand a security deposit from its affiliate. Its unlikely conclusion that no deposit is necessary, however, highlights the problems when Verizon is provided with the ability to decide which carriers must provide security deposits or advance payments

29 Thus, through the use of its discretion, Verizon is able to require rival IXCs *to* provide large deposits for access revenues, while exempting its own long distance affiliate's operations from the same requirement. That is an instance of raising rivals' costs that poses serious competitive concerns.

30. Even more troubling, there ***is*** only a limited check on Verizon's ability to demand security deposits. Although Verizon claims it wants to implement credit practices that are prevalent throughout other industries, the credit practices of companies in other competitive industries are subject to market discipline. If such a company demands a security deposit from a customer, it risks losing that customer's business, because the customer may be able to seek out another supplier that offers more favorable credit terms. These market forces provide a powerful incentive for companies in competitive industries to make reasonable credit demands and limit security deposit requests to exceptionally risky customers.

3 I Verizon, by contrast, has set the criteria to demand security deposits or advance payments in a way that there is currently no competitive check on its deposit decisions. Its access customers generally have no choice but to purchase service from Verizon. In that instance, Verizon has no incentive to make reasonable credit determinations In fact, it has every incentive to make an ***unreasonable*** credit

determination, precisely because such decisions can raise its rivals' costs. For these reasons. Verizon's credit determination criteria are anticompetitive.

32. As mentioned previously, once Verizon had determined that either a security deposit or advance payment was necessary, the customer would have ten days to comply with Verizon's request for a security deposit and would have seven days to comply with Verizon's request for an advance payment Verizon could thus time its request for payment at the most inopportune time for its competitors. Surprisingly, there is no provision for dispute or resolution in the event that Verizon made an inaccurate determination under the six criteria. Further, the customer could only receive its deposit back from Verizon or stop advance billing by making a written request. This request would have to show that the customer has paid its account in full, currently does not meet any of the six criteria for requiring a security deposit, and has not met any of the six criteria for at least a year

33. While not entirely clear from Verizon's proposed language, this would appear to give Verizon a one-year period whereby it could erroneously demand a security deposit or advance payment from a competing IXC on very short notice without any recourse for a period of at least a year. These provisions have considerable potential for abuse on Verizon's part for the purpose of harming competition in the interstate long distance market served by Verizon's local exchange network

34. Even if Verizon were to decide to impose a security deposit and pay interest. competition could be harmed because such a deposit would prematurely tie up cash or collateral that could be used in the operations of competing IXCs. As mentioned above, the security deposit required by Verizon could equal up to two months' estimated

billings. both under its current tariffs and under Verizon's proposed tariff revisions. However, the proposed tariff revisions would doubtlessly broaden Verizon's ability to burden its competitors with security deposits, thereby increasing its likelihood of doing so. Even where such a deposit accrues interest, it represents a premature loss of cash or collateral to the customers' operations while it is held, and the interest is not paid until a later date Further, the non-interest bearing advance payment represents a tying up of one month's cash or collateral from a given customer This reduced liquidity can considerably raise the cost of doing business for that customer and has considerable potential to harm competition.

Conclusions

35. The proposed modifications to its tariff agreement that Verizon seeks with respect to wholesale interstate long-distance customer deposits have not been proven to be necessary, and appear to be designed to economically disadvantage competitors.

- Verizon has failed to show that a recession-induced increase in its interstate long-distance wholesale uncollectible receivables is permanent.
- An analysis of uncollectible wholesale interstate long-distance termination receivables as a percentage of revenues for Verizon and other **LECs** shows that percentage uncollectibles fluctuated and were volatile over the period 1990 to 2001 There was no trend evident indicating a permanent increase in uncollectibles either for Verizon or for LECs in general.
- Verizon has an unusual opportunity to discriminate on behalf of its own long-distance affiliate, which, although theoretically treated as a stand-

alone start-up, in reality has the benefit of Verizon's brand name and credit reputation to attract customers.

- To the extent that Verizon's IXC customers have standards for security deposits that are as stringent, or more stringent than Verizon's, these customers will likely pass on their increased collections with respect to their end-user receivables to Verizon in the future.
- Verizon has also earned above-expected rates of return on its invested assets during the period of which it complains, even when these uncollectible amounts are taken into account
- Because Verizon is subject to price cap regulation, it should bear the business risks of any potential excess profits it can generate.
- Verizon's ability to exercise discretion regarding whether to require an interest-bearing security deposit or a non-interest bearing advance payment from a customer has potential for both abuse and harm to competition.
- Verizon's requirement that a customer comply with its determination that a security deposit or advance payment is necessary within a short period of time, the lack of recourse available to such customer, and the likelihood of such customer having to wait at least a year for any refund of such deposit or halting of such advance payment has considerable potential for both abuse and harm to competition.
- Bond ratings that are below investment grade do not mean that there is a high current likelihood of default.

- Verizon's proposed revisions could lead to considerable discrimination on its part against the [XC wholesale customers that are also its interstate long-distance competitors.

VERIFICATION PAGE

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

/s/ Bradford Cornell

Bradford Cornell

Executed on November 12, 2002

BRADFORD CORNELL — Professor of *Financial Economics,* Anderson Graduate School of Management, UCLA

Ph.D.	Financial Economics, Stanford University, 1975
M.S.	Statistics, Stanford University, 1974
A.B.	(Interdepartmental) Physics, Philosophy and Psychology, Stanford University, 1970

ACADEMIC AND PROFESSIONAL POSITIONS

1987–Present:	Professor of Finance and Director of the Bank of America Research Center, Anderson Graduate School of Management, UCLA
1990–1999:	President, FinEcon: Financial Economic Consulting
1988–1990:	Vice-president and Director of the Securities Litigation Group, Economic Analysis Corporation
1979–1986:	Assistant and Associate Professor of Finance, UCLA
1983–1984:	Visiting Professor of Finance, California Institute of Technology
1977–1979:	Assistant Professor of Finance, University of Southern California
1975–1977:	Assistant Professor of Finance, University of Arizona

COURSES TAUGHT

Corporate Valuation
The Law and Finance of Corporate Acquisitions and Restructurings
Corporate Financial Theory
The Theory of Finance (in the UCLA Law School)
Security Valuation and Investments
A wide variety of executive and community education programs

SPECIAL EDUCATION PROGRAMS INCLUDE

The U S Business School in Prague—Special Finance Program, Summer 1991
The Nissan Program for Historically Black Colleges, Director, Summer 1989
The Lead Program for Business Education of Minority High School Students, 1987–Present

CONSULTING AND PROFESSIONAL ACTIVITIES

SELECTED SERVICE AT UCLA

Twice Chairman of Finance Department

Twice Vice Chairman of the Anderson School
Three-time member of the staffing and promotion committee

SERVICE TO SCHOLARLY JOURNALS AND ORGANIZATIONS

Served as an associate editor for a variety of scholarly and business journals including: *Journal of Finance*, *Journal of International Business Studies*, *Journal of Business and Economics*, *Journal of Financial Research*. *Journal of Futures Markets*, and the *Investment Managemeni Review*.

Served as a reviewer for numerous finance and economics journals including: *American Economic Review*, *Journal of Political Economy*. *Journal of Financial Economics*. *Journal of Business*. *Journal of Financial and Quantitative Analysis*, and the *Review of Economics and Statistics*.

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Finance Association: 1973–Present
    Member of Board of Directors: 1987–1989
Western Finance Association: 1973-Present
    Member of Board of Directors: 1982–1985
    Vice President. 1987
American Economic Association: 1973–Present
American Bar Association: 1995–Present
American Statistical Association: 1992–Present
International Association of Financial Engineers. 1993–Present
American Law and Economics Association: 1995–Present
Human Behavior and Evolution Society: 1995–Present

RESEARCH EVALUATION

Project reviewer for the National Science Foundation: 1979–Present
Program committee for the Western Finance Association: 1982–1988

SELECTED BOARD AND COMMITTEE MEMBERSHIPS

Chairman, Mayor Riordan's Blue Ribbon Commission on Los Angeles' Municipal Investments
Pension Policy Board, The Aerospace Corporation: 1985–Present
Forms Engineering Corporation: 1976–1997
Trustee, Kellow Trust. 1982–1991

SELECTED CONSULTING CLIENTS

Merrill Lynch (obtained futures broker's license, owned a seat on the International Monetary Market of the Chicago Mercantile Exchange)
Chase Manhattan Bank
Thrifty Corporation
Wynn Oil

Resorts International

EXPERT WITNESS

Numerous cases involving the application of financial economics

MEDIA EXPERIENCE

Occasional contributor to ***The*** *Wall Street Journal* and *The Los Angeles Times*
Occasional commentator for local television and radio stations
Lecturer on valuation theory, appraisal practice, and securities pricing

PUBLICATIONS

BOOKS

Cornell, B , 1999, *The Equity Risk* ***Premium*** *and the Long-run Future of the Stock Market,* John Wiley and Sons, New York, NY.

Cornell, B **,** 1994, "Corporate Valuation," in *Handbook of Modern Finance,* 3rd edition, Dennis Logue, ed., Warren Gorham Lamont, Boston, MA.

Cornell, B., 1993, *Corporate Valuation: Tools* ***for*** *Effective Appraisal and Decision Making,* Business One Irwin, New York, NY.

ACADEMIC ARTICLES

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Exhibit 2

Interstate less End-user Uncollectibles as Percent of Interstate less End-user Revenues

	Ameritech	BellSouth	Citizens*	Iowa Telecom*	Pacific Bell	Nevada Bell
1990	0.43%	0.24%	1.61%	0.20%	0.31%	0.13%
1991	0.53%	0.30%	2.19%	1.09%	0.22%	0.14%
1992	0.45%	0.28%	1.23%	-0.48%	0.24%	0.27%
1993	0.51%	0.15%	1.58%	0.56%	0.17%	0.20%
1994	0.68%	0.38%	0.89%	0.53%	0.15%	0.18%
1995	0.29%	0.40%	0.59%	0.17%	0.18%	0.15%
1996	0.60%	0.83%	0.63%	0.39%	0.21%	0.18%
1997	0.26%	1.05%	0.64%	0.53%	0.31%	1.13%
1998	0.40%	0.43%	0.40%	0.48%	0.08%	0.43%
1999	0.16%	0.35%	0.52%	0.75%	0.21%	0.31%
2000	0.11%	0.74%	0.48%	not available	0.19%	0.22%
2001	0.11%	1.46%	0.59%	not available	0.23%	0.28%

	Qwest	Southern New England Telephone	Sprint*	Southwestern	Verizon East	Verizon West
1990	0.36%	0.14%	0.18%	0.45%	0.38%	0.35%
1991	0.58%	0.52%	0.15%	0.30%	0.25%	0.84%
1992	0.52%	0.48%	0.05%	0.32%	0.33%	0.91%
1993	0.41%	0.26%	0.22%	0.35%	0.51%	0.54%
1994	0.45%	0.23%	0.05%	0.30%	0.67%	0.52%
1995	0.56%	0.16%	0.23%	0.26%	0.58%	0.77%
1996	0.59%	0.41%	0.15%	0.29%	0.50%	0.51%
1997	0.58%	0.93%	0.21%	0.29%	0.40%	0.52%
1998	0.92%	0.32%	0.23%	0.31%	0.35%	0.54%
1999	0.74%	0.26%	0.20%	0.41%	0.35%	1.05%
2000	0.18%	0.25%	0.39%	0.76%	0.49%	0.78%
2001	0.45%	0.48%	0.77%	1.12%	1.36%	0.77%

* No End-user data available. Percentages based on Interstate data only.

Data Sources Used to Calculate Percenlages: ARMIS Reports 43-01 and 43-02

Exhibit 3

RBOC Interstate Earnings

	Avg Net Investment *	Net Return **	Rate of
BellSouth			
1997	4,761,659	784.700	16.48%
1998	4,694,980	841.675	17.93%
1999	4,941,823	906,349	18.34%
2000	5,315,088	1,099,428	20.69%
2001	5,878,471	1,140,874	19.4 1%
Qwest			
1997	3,865,936	583.536	15.09%
1998	3,725,083	604,050	16.22%
1999	3,842,608	745.917	19.41%
2000	4,271,934	861.903	20.18%
2001	4,752,456	1,051,736	22.13%
SBC			
1997	9,631,804	1,297,272	13.47%
1998	9,482,894	1,473,017	15.53%
1999	9,317,047	1,758,596	18.88%
2000	10,103,928	2,119,427	20.98%
2001	11,565,699	2,586,020	22.36%
Verizon (North+South+GTE)			
1997	12,283,778	2,028,559	16.51%
1998	12,865,280	1,994,088	15.50%
1999	13,450,002	2,339,833	17.40%
2000	14,388,378	2,480,784	17.24%
2001	15,201,546	2,596,471	17.08%
Verizon (excl. NYNEX)			
1997	8,541,524	1,519,974	17.80%
1998	8,886,551	1,531,316	17.23%
1999	9,267,436	1,919,967	20.72%
2000	9,662,367	2,073,302	21.46%
2001	10,074,982	2.213,353	21.97%

Note:

* - 1997-2001 **ARMIS** 43-01. **Table I. Cost and Revenue Table, Interstate. Column** (h), **Average Net** Investment, **Row** 1910.

** - 1997-2001 **ARMIS** 43-01, **Table** I. **Cost and Revenue Table, Inlerslate. Column** (h), **Net** Return, **Row** 1915.

Cornell Exhibit 4

Table of Long Term Debt Ratinp For Selected Telecommunications Companies (November 2002) by Nationally Reconpized Statistical Ratinp Organizations (NRSROs)

(Non-BOC Companies Falling Outside Verizon Criteria Shown In Bold)

COMPANY	S&P			Moody's			Fitch		
	Rating	Investment Grade	Watch	Rating	Investment Grade	Watch	Rating	Investment Grade	Watch
RBOCs									
BellSouth	A+	YES	Negative	Aa3	YES	Negative	A+	YES	Negative
Qwest (US West)	B-	NO	Negative	Caa1	NO	Negative	B	NO	Negative
SBC	AA-	YES	Negative	Aa3	YES	Negative	AA-	YES	Negative
Verizon	A+	YES	Negative	A1	YES	Negative	AA	YES	Negative
Interexchange Carriers									
AT&T Corp.	**BBB+**	**YES**	**Negative**	**Baa2**	**YES**	**negative**	**BBB+**	**YES**	**Stable**
WorldCom Inc.	D	NO		Ca	NO	negative	D	NO	
Sprint Corp	BBB-	YES		Baa3	YES	negative	BBB	YES	Stable
Qwest Corp. [ratings shown for parent; Qwest Comm. Int'l]	– B	NO		Caal	NO		N/A		
Concert Global Networks USA, LLC	N/A			NIA			N/A		
IDT Corp	N/A			B2	NO		N/A		
Global Crossing Corp.	NIA			NIA			N/A		
VarTec Telecom, Inc.	N/A			NIA			N/A		
LCI Int'l Telecom Corp. (Qwest Corp Subsidiary)	B-	NO		Caa1	NO		CCC+	NO	Negative
Verizon Long Distance [ratings shown for parent; Verizon]	A+	YES	negative	AI	YES	negative	AA	YES	negative
Global Crossing Telecommunications, Inc	NIA			NIA			N/A		

Table of Lonp Term Debt Ratinp For Selected Telecommunications Companies (November 2002) by Nationally Recopnized Statistical Rating Organizations (NRSROs)

(Non-BOC Companies Falling Outside Verizon Criteria Shown In Bold)

Broadwing Communications Services, Inc	BB	NO	Negative	B1	NO	Negative	BB	NO	Negative
Teleport Communications Group Inc [ratings shown for parent; AT&T Corp.]	BBB+	YES	Negative	Baa2	YES		BBB+	YES	Negative
Excel Telecommunications [ratings shown for parent; Teleglobe Group]	N/A			C	NO		D	NO	
Cable & Wireless Plc	A	YES		A3	YES	Negative	A-1	YES	Negative
Williams Communications, LLC	N/A			N/A			N/A		
Verizon Select Services, Inc [ratings shown for parent, Verizon]	A+	YES	negative	A1	YES	negative	AA	YES	negative
Touch America, Inc	BBB+	YES		Baal	YES		N/A		
McLeodUSA Telecommunications Services	N/A			N/A			N/A		
Southwestern Bell Communications Services [ratings shown for parent SBC]	AA	YES	Negative	Aa3	Yes	Negative	AA-	YES	Negative
Broadwing Telecommunications Inc. (ratings shown for Parent; Broadwing (Cincinnati Bell))	BB	NO		B1	NO		BB	NO	
Network Plus, Inc.	N/A			N/A			N/A		
BellSouth Long Distance, Inc [ratings shown for parent; Bellsouth]	A+	YES	Negative	Aa3	YES	Negative	At	YES	negative
Primus Telecommunications. Inc	CCC+	NO		Caa2	NO		N/A		
Business Telecom, Inc.	N/A			NIA			N/A		

Table of Long Term Debt Ratinp For Selected Telecommunications Companies (November 2002) by Nationally Recopnized Statistical Rating Orpanizations (NRSROs)

(Non-BOC Companies Falling Outside Verizon Criteria Shown In Bold)

Americatel Corporation	N/A			N/A			NIA		
ITC DeltaCom Communications, Inc.	D	NO		Ca	NO		NIA		
Talk America Inc. (f/k/a) talk.com Holding Corp.	N/A			N/A			N/A		
Evercom Systems, Inc.	D	NO		Ca	NO	Negative	N/A		
General Communication. Inc. (GCI Inc)	BB	NO	Negative	02	NO		NIA		
Electric Lightwave, Inc	N/A			Baa2	YES		BBB	YES	
Teleglobe Group	N/A			C	NO		D	NO	
PT-1 Long Distance, Inc (or Star Telecommunications)	NIA			N/A			NIA		
Equant Operations Inc ratings shown for parent, France Telecom]	BBB	YES		Baa3	Yes		BBB	YES	
WET America, Inc N/A ratings shown for parent SNET Corp]	AA-	YES	stable	Aa3	YES	Negative	AA-	YES	
ALLTEL Communications, Inc	A	YES	Negative	A2	YES	Stable	A	YES	Stable
Level 3 Communications, LLC	CCC	NO		Caa3	NO		N/A		
Norlight Telecommunications, Inc	N/A			N/A			NIA		
Lightyear Communications, Inc	N/A			N/A			N/A		
Working Assets Funding Services, Inc	N/A			N/A			N/A		