

XYZ-Our Town Lightwave, Inc.

v.

QRS Fiber

Rebuttal Report of

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Appendix 1

Appendix 2

Section 1 - Introduction

I am Christopher C. Pflaum, President of Spectrum Economics, Inc. who is the primary author of the counterclaimant's antitrust report in this matter. In preparing this rebuttal report, I have again been assisted by Prof. Nicholas Economides of New York University and Mr. Eric Frye.

In his report of May 16, 1997, counterdefendants' expert Alan J. Guy makes numerous criticisms and observations regarding the antitrust claims of Our Town Lightwave, Inc. His report contains assertions regarding: the proper definition of the relevant product market; the "essential" nature of Access to Power Co.'s poles; factors other than Power Co.'s exclusionary conduct which delayed XYZ's entry into the CAP market in Our Town; and justifications for the conduct of Power Co. and QRS. I will show that Guy's conclusions are geABCDlly based on misinformation, lack of knowledge of the facts of this matter and highly selective, frequently out of context, citations to the record.

Dr. Guy argues that the relevant market is extremely broad and includes the local exchange carrier (U S West), cable tv and a host of cellular carriers. In this rebuttal, I will demonstrate that Dr. Guy's analysis is confused, factually inAccurate, illogical and does not comport with economic theory or antitrust law and economics. I will show that my definition of a distinguishable CAP market, which is supported by explicit economic modeling of the market for reliability, also comports with the practical indicia of a relevant market defined in *Brown Shoe*¹, the antitrust concept of reasonable interchangeability² and "actual market realities" as defined by the court *Kodak v. Image Tech. Serv.*³

I will show that Dr. Guy's conclusion that XYZ could construct a CAP network in Our Town without Access to Power Co.'s poles is based on incomplete or incorrect information, misinterpretation and selective culling of deposition testimony, and analytical deficiencies. His opinion that XYZ was delayed by factors other than the conduct of his client and its coconspirator Power Co. is incorrect for these same reasons.

Dr. Guy also states in his report that the actions of Power Co. were proper because it had a public utility obligation to recover from what he suggests was regulatory-induced financial distress. In addition to showing that Power Co.'s financial distress was due to fraud by its former executives against both shareholders and customers⁴, I will show that Guy's position is totally illogical and is not supported by any known regulatory or legal theory. His fundamental point is that it was proper

¹ *Brown Shoe Co. v United States*, 370 U.S. 294 (1962)

² *United States v. E.I. du Pont de Nemours & Co.* 351 U.S. 377 (1956).

³ *Eastman Kodak Co. v. Image Tech. Serv. Inc.*, 504 U.S. 451 (1992).

⁴ I was a consultant to the PUC and to the attorneys for the plaintiffs in a securities fraud lawsuit regarding the activities of Power Co.'s former CEO, Mr. Dillinger, and other executives..

for Power Co. to behave anticompetitively because Power Co. needed money and this was a good way to get it. I find this proposition incredible.

I will also show that Dr. Guy's report is a confused melange of statements in which the distinctions between services, time, place and competitors are blurred. He continually points to places other than Our Town, local exchange carriers other than RBOC and Competitive Access Providers other than QRS to fabricate a market which is open, served by all known technologies and invulnerable to anticompetitive actions. Time and place are not abstract concepts in antitrust law which is designed to protect real markets not provide grist for the intellectual mill. Though Dr. Guy's market may exist somewhere, sometime and provide an interesting laboratory for his antitrust theories, that somewhere was not Our Town in 1994 and 1995 or today.

Section 2 - Relevant Product Market

Market power injures consumers when there are barriers to entry into the market by competitors. If entry is costless, the threat of entry will discipline the behavior of market incumbents even if they possess an absolute monopoly. Dr. Guy attempts to demonstrate that QRS did not have market power and there were no barriers to entry. For numerous reasons, explained below, his analysis fails.

Section 2.1 - CAPs Clearly Meet The Standard Tests of a Relevant Product Market

In my opinion an important area of disagreement between Dr. Guy and myself is whether or not RBOC, the Our Town LEC, is in the relevant product market. Since RBOC, XYZ, and Radio Shack are all obviously in the broadly defined market known as telecommunications, the key questions are whether: 1) there is another, more narrowly defined market called "Competitive Access" relevant to this case, and 2) whether RBOC is the dominant firm in this market.

It is my opinion that there is in Our Town a distinct CAP market. A definable CAP market meets the indicia of a market cited by the U.S. Supreme Court in *Brown Shoe Co., Inc. v. United States*⁵ in that:

- There is public recognition of a CAP industry.
- The nature of the high speed Access and high reliability of the product gives it peculiar characteristics and uses which separate it from traditional telephone company service and Access over copper lines.
- There are unique production facilities, namely fiber optic SONET, which differentiate CAP service from traditional telephone company service.

⁵ 370 US 294 (1962)

- CAP service is sold to a distinct set of customers who are in telecommunications-intensive businesses which substantially benefit from the high reliability, bandwidth and flexibility of a CAP system.
- CAP prices are distinct from those of the LEC, they are uniformly lower, even though the service is superior and in many markets are far below those charged by the LEC.
- Large users of CAP services, primarily the interexchange carriers, are very sensitive to price differences between CAPs in negotiating for new or additional service.
- There are specialized firms which offer CAP services and are recognized as CAPs. QRS, XYZ, MFS, Teleport and ACSI are among the best known.

Section 2.2 - Quality As A Basis For Product Differentiation

It is well known in economics that there is a cross elasticity of demand for like products of different quality. It is also well known that the greater the difference in the quality of two products, the lower the cross elasticity between them. Though it is not mathematically possible to develop a theory of market definition based on quality differences, it is possible as a practical matter to differentiate product markets on the basis of quality. Though no one would suggest that there is not significant cross elasticity of demand between large BMW and Mercedes sedans, few would suggest that there is any significant cross elasticity of demand between large Mercedes sedans and Yugos. In fact, quality is one of the three product attribute which determine the degree to which products are interchangeable and, therefore, in the same product market. If products are not reasonably interchangeable, the pricing of one does not discipline the pricing of the others since consumers cannot easily substitute them. The courts have long recognized quality, use and price as the factors which determine interchangeability.⁶

Products of dissimilar quality can be in the same broad product market yet be in different antitrust markets or submarkets. This is true in this matter where CAP service is part of the extremely broad telecommunications market yet is distinguishable from LEC service in many aspects. In our report, we cite extensive evidence that CAP service is superior to that offered by U S West in technology, customer responsiveness and reliability. RBOC does not offer SONET service in most areas of Our Town and, for regulatory and other reasons, is not likely to in the foreseeable future. Therefore, the alternative to DS1 CAP service offered by RBOC is T-1, a decades old technology offered over twisted copper wire which is not redundant in electronics or self-healing and is susceptible to numerous forms of transmission interference.

In our report, we also cite extensive evidence of the extremely poor level of customer service offered by RBOC. Since customer service, to include responsiveness to requests for installation and repair

⁶ *United States v. E.I. du Pont de Nemours & Co.* 351 U.S. 377 (1956).

and questions regarding billing and services, is a critical component of quality, this facet of the product would by itself put CAPs in a separate product market given CAPs' demonstrated superior customer service characteristics. Installation reliability, the percent of the time a provider can provide service within the time period it is requested, is also part of the market for reliability that we show in our previous report to exhibit a very low cross elasticity of demand between providers.

As a practical matter, the quality issue is critical. RBOC does not compete on service. As discussed in my initial report, the simple fact is that RBOC did not take action to improve its customer service until forced to do so by state public utility commissions. If there is to be competition on the basis of quality of the product and service to the customer, this competition will be among the CAPs. RBOC has strong economic incentives not to join the fray and compete for the niche targeted by CAPs choosing rather to exploit its unassailable, residual monopoly in other markets. Dr. Guy has simply failed to make any argument at all, never mind a compelling one, that RBOC is competing or has any reason to compete in the CAP market.

Aside from quality, our report analyzes in detail the product characteristic of reliability. Though reliability is often thought of as a quality attribute, we show in our report that it has some very unique characteristics in relation to market definition. We show mathematically that the market for reliability is distinguished by a very low cross elasticity of demand between services which provide otherwise indistinguishable functionality. We further make the observation that providing reliability requires, as a practical matter, multiple carriers. Therefore, based on our analysis of the market for reliability, we show in our initial report that CAPs and the LEC are in different relevant product markets. Dr. Guy has not addressed reliability in his report.

Section 2.3 - Guy's Price Correlation Arguments Are Not Persuasive

Dr. Guy purports to show that CAP and LEC prices are correlated on pages 22 though 24 of his report. His supposed proof is a series of graphs on which LEC and CAP prices for DS1 and DS0 service fall roughly along an upward sloping line.⁷ If the prices of two products across a series of geographical markets fall along an upward sloping line, they are correlated and may be in the same relevant product market. There are numerous problems with Dr. Guy's evidence.

First, his analysis is irrelevant. The issue is not whether there is correlation in other geographic markets or across geographic markets but whether there is any such correlation in Our Town. It does not follow that because there is a relationship between prices in some geographical markets, there is a relationship in Our Town. It is entirely possible that while other LECs are aggressively competing in the CAP and high speed Access market, RBOC is not. We present evidence in our report that, in fact, RBOC is not providing high speed, fiber based services to any significant portion of Our Town

⁷ The data he uses are almost four years old and are for New York, Dallas and two unnamed cities served by Teleport Communications Group. All four cities are far larger than Our Town.

**Table 1
DS1 (T-1) Service**

City	Provider	Monthly Charge	Installation	Average Monthly Charge (3 yrs)
City	XXXX	\$150	\$500	\$164
City	XXXX	\$230	\$626	\$247
City	XXXX	\$160	\$500	\$174
City	XXXX	\$270	\$1267	\$306
City	XXXX	\$215	\$500	\$229
City	XXXX	\$330	\$1214	\$364
City	XXXX	\$210	\$500	\$224
City	XXXX	\$360	\$620	\$377

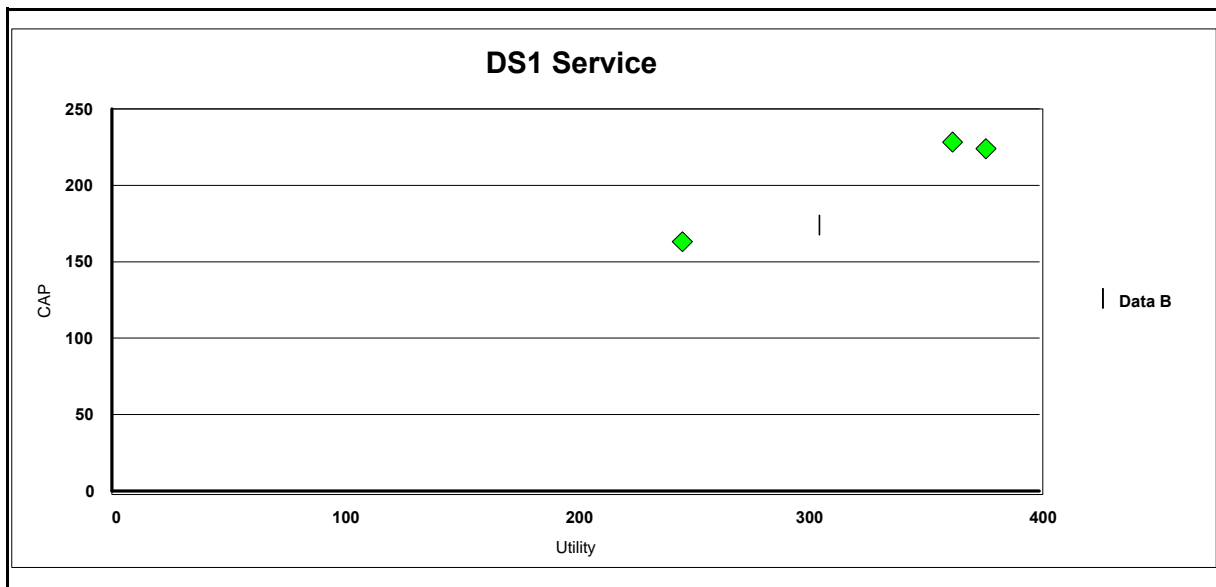
**Table 2
DS3 Service**

City	Provider	Monthly Charge	Installation	Average Monthly Charge (3 yrs)
City	XXXX	\$800	\$400	\$811
City	XXXX	\$2620	\$626	\$2637
City	XXXX	\$950	\$1600	\$994
City	XXXX	\$4600	\$6000	\$4767
City	XXXX	\$900	\$1600	\$944
City	XXXX	\$3900	\$1224	\$3934
City	XXXX	\$850	0	\$850
City	XXXX	\$4940	\$50	\$4941

customers and that RBOC is by far the most backward Regional Bell Company with respect to deployment of new technology. Dr. Guy's report provides no compelling evidence to the contrary.

Further, Dr. Guy has also used out of date prices to support his predetermined conclusion. The consequences of his lack of timely data are critical to the relationship Dr. Guy wishes to claim exists between CAP and LEC services. In Tables 1 and 2, we present prices currently charged by the LEC and a CAP, TCG, in four cities across the United States for DS1 and DS3 services. As can be seen in the graphs of these data, Figures 1 and 2, the points do not fall on a significantly upward sloping line which indicates, According to Guy, that the CAP and LECs do not price against each other and are not in the same product market. Also note that CAP prices are from 35% to 79% below the LEC price, another indication that they are in separate product markets since identical products cannot sell at different prices in the same market.⁸

Figure - 1



Another problem in Guy's analysis is his embrace of the "Cellophane Fallacy."⁹ If prices fall along an upward sloping line, as they do in Guy's example, they are said to be correlated. If a market is competitive, the prices of substitutes will be correlated. However, if the market is monopolized and prices are set in excess of the competitive level, correlation may be found between the prices of products not in the same market.

⁸ If the prices are vastly different, one cannot discipline the other. Hence, the products are considered to be in separate antitrust markets. See *US v ADM*.

⁹ See Lawrence Sullivan, *Antitrust Law*, pg. 55 - 56

This correlation is found because imperfect substitutes become "adequate" when the desired product is priced monopolistically (i.e., because the monopolist prices on the elastic portion of the demand curve). Thus in the cellophane antitrust litigation against du Pont, though it was shown that many other wrapping materials exhibited a high cross elasticity with cellophane, this did not prove that they were in the same relevant product market because du Pont priced cellophane at a monopoly level.

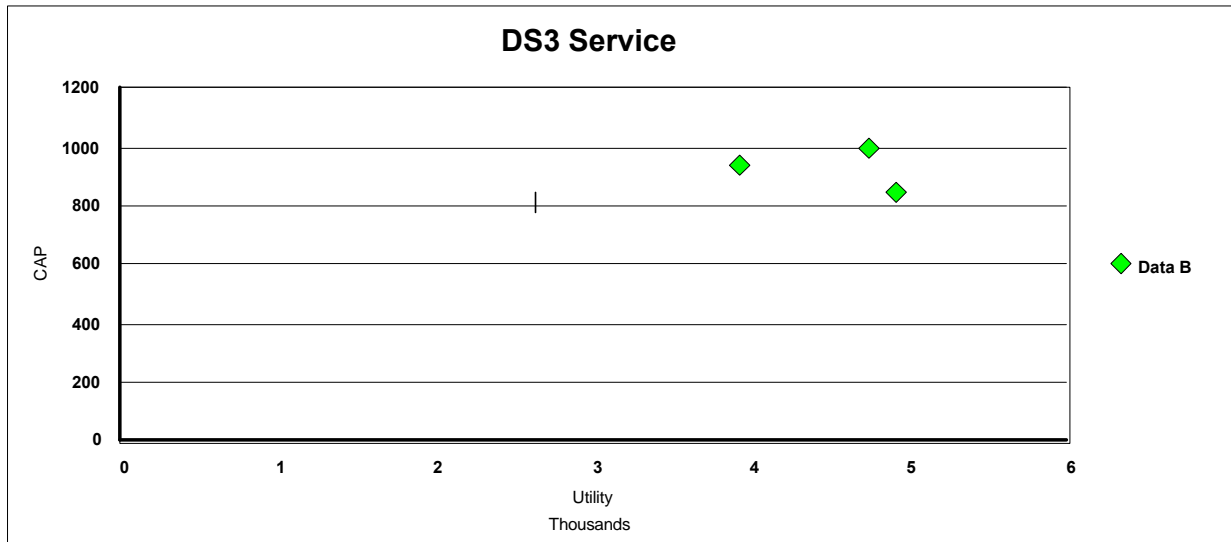


Figure - 2

Finally, if one examines the data Guy presents for DS3 service, it is apparent that there is no strong correlation. Thus, Dr. Guy has failed to demonstrate his central thesis According to his own limited test for establishing a single product market.

Section 2.4 - Artificially Inflated Prices Do Not Provide A Relevant Standard For Market Definition Tests

In competitive markets the same good cannot sell for different prices because all buyers will turn to the lowest price seller. Since goods can differ in some quantitative and qualitative aspects, prices of competing goods need not be identical but rather only need move together or, put differently, their ratios tend to be constant. Economists have developed numerous tests of market definition based on price relationships. These tests do not hold, however, when one of the prices is held at an artificially inflated level through price supports or utility regulation.

Telephone rates paid by businesses, including those for high speed private lines and special Access (i.e. T1) have historically been inflated in order to provide subsidies for residential telephone service

and service in high cost rural areas. In a similar circumstance involving competition between high fructose corn sweetener (HFCS) and sugar, the Eighth Circuit noted:

We Accept the finding that sugar and HFCS are functionally interchangeable for all uses for which HFCS is suitable, but we cannot ignore the fact that Congress has enacted a sugar program that has artificially inflated the price of sugar. As a result, the domestic price of HFCS has been 10%-30% lower than the price of sugar. ..[A]s long as an effective price support program is in existence, a monopolist of HFCS will be able to raise the price of HFCS to just below the supported price of sugar before being constrained by the competitive forces of sugar. In other words, the HFCS monopolist is able to exercise market power.¹⁰

In the market for CAP services in Our Town, a similar situation exists. RBOC offers services which are inferior in quality and reliability to those of CAPs but offer some of the same functionality at an artificially high price. We know that the price is artificially high because QRS expected to earn a 50% return on equity in Our Town even though it was pricing 15% below RBOC rates, expected rates to fall annually and would be starting from scratch.¹¹ We also know that in highly competitive CAP markets such as Los Angeles, prices are substantially below those in, for example, Our Town.

Returns at these levels and large price disparities across geographic markets (where technology is the same) would not be observed in a competitive market. This indicates that rates 15% below those of RBOC are still significantly higher than cost plus a reasonable return such as would be expected if the Our Town CAP market were competitive. Therefore, even if CAP and RBOC service were functionally interchangeable (which they are not), Dr. Guy's argument that RBOC disciplines pricing of CAPs in Our Town does not hold. They are not in the same economic market since a CAP monopolist could price well above a competitive level before it reached the level of RBOC's prices.

Section 2.5 - Guy Has Not Properly Applied The Merger Guidelines Test

The U.S. Department of Justice analyzes the competitive effects of mergers by examining the effect on market shares of competitors of a 5% increase in price. If such a non-transitory price increase is found to result in a significant loss of market share, the market is found competitive. A price increase will cause loss of market if customers shift suppliers or if other suppliers enter the market because of the opportunity for profit caused by the higher price. Dr. Guy purports to conduct such an analysis in the market definition section of his report.

¹⁰ *United States v. Archer-Daniels-Midland Company*, 866 F.2d 242,246 (8th Cir. 1988), cert. denied, 493 U.S. 809 (1989)

¹¹ See Appendix 1

Dr. Guy asserts that customers would switch from a CAP to RBOC in response to a 5% price increase but provides no evidence of such a switch in Our Town or elsewhere. His contention, in fact, is demonstrably false. Had he examined the Our Town market, he would have found this conclusion to be erroneous because of the high installation cost of special Access facilities, the business disruption caused by changing carriers and the common use of multiyear contracts with price varying According to contract term -- all strongly discourage switching in response to a small change in price. Examples of installation costs and price differentials for different contract terms are presented in the following table, Table 3.

**Table 3
Our Town CAP Prices**

Redacted

CAP/Service	Customer	Installation	Monthly If One Year	Monthly If Three Year	Monthly If > Three
XYZ DS1					
XYZ DS1					
XYZ DS3					
QRS 4DS1					
QRS DS1					
QRS 2DS1					
QRS DS1					

If a customer wished to switch after the installation of service, it would have to again pay the equivalent of two months billings for a new installation which on a one year contract is xx% and would lose retroactively the differential for a longer term, typically a loss of about xx%. This, of course, assumes that the serving CAP would permit the contract to be broken and that there are no additional costs associated with contract termination.

Additionally, since the evidence in this case clearly indicates that all CAPs price Access below the RBOC tariff rate, if a switch were to take place it would be to another CAP not to RBOC, further indicating the lack of cross-elasticity between RBOC and Our Town CAP service. In fact, analysis of switching costs is the dominant method economists use to determine whether there are barriers to entry in technology markets and by this analysis there are very significant barriers to entry.

Another method used in applying the Guidelines is to look at the cost structures of firms that could enter the market to determine if a 5% price increase would cause them to enter. Dr. Guy has not conducted any such analysis, preferring to simply assume entry. Though we do not know the cost

associated with, for example, the entry of cable companies, we do know that TCI and many others have decided that they cannot compete at this time with the LECs. This suggests that a 5% increase in CAP rates which are xx% or more below LEC rates would not attract entry by CATV firms.

There are additional problems with Dr. Guy's use of the Guidelines. The Guidelines refer to two types of supply responses (e.g., entry) to price increases resulting from market power:

- "Uncommitted entrants" are those who will enter the market within a year following a "small but significant and non transitory price increase." These firms enter without the expenditure of a significant sunk cost and therefore, can enter and exit the market virtually costlessly; and
- "Committed entrants" are firms that can enter only by incurring significant costs of entry and exit (sunk costs).

Though he does not specifically say so in his report, the two year horizon cited by Dr. Guy refers to the second type of entrant. He appears to admit, therefore, that no uncommitted entrants were in the Our Town market. The Guidelines provide for a three step procedure to determine whether committed entry is likely to occur and cause prices to fall back to the pre merger (non monopoly) level:

- Whether entry can achieve significant market impact in a timely period, generally two years or less;
- Whether entry would be profitable; and
- Whether timely and likely entry would be sufficient to return market prices to their premerger levels (i.e., result in competition rather than stable duopoly).

In my opinion, Dr. Guy has neither identified the entrants nor provided the required analysis to assert that in 1994 conditions in Our Town favored committed entry in the face of a de facto 19 month QRS monopoly. With this monopoly, as we point out in our report, QRS would have significant first mover advantages in both marketing and system cost which would have discouraged entry.

Throughout his report, Dr. Guy raises questions and then assumes answers; not surprisingly those which support his argument. For example, he assumes that large telecommunications users are more sensitive to price than those with lesser needs. There is no basis for this assumption which further begs the question of price of what? These users are no doubt sensitive when all things are held equal, this is the classic case of identical products. However, as pointed out in our report, these large users are very sensitive to reliability and, therefore, have the highest willingness to pay for reliability and exhibit low cross elasticity between CAP and LEC service. Hence, economic logic and mathematics compel the rejection of Dr. Guy's assertion and, with it, his Guideline-based argument regarding the relevant product market.

Finally, Guy's Merger Guideline analysis is irrelevant and incorrect. First, the Guidelines were not written to address private antitrust claims such as the Section 1 exclusive dealing and Section 2 attempted monopolization and conspiracy to monopolize claims involved here. Second, the Guidelines are merely a statement of Justice Department policy and are not binding on the courts.¹² The fact is that consumers have been harmed by QRS and Power Co.'s attempt to monopolize the CAP market for some period of time. Though the market may have subsequently become more competitive¹³, some of this harm in fact has extended beyond two years because five year contracts are common in the industry and switching costs make changing CAPs expensive.

Section 2.6 - A Businessman's Notion of "Competition" Is Broader Than The Antitrust Concept

In Section III E and III F, Dr. Guy develops a market definition argument based on statements by XYZ and other CAPs which indicate that, in his opinion, they consider themselves to be competitors of the LEC, U.S. West. However, generalized statements about "competing" are not necessarily meaningful regarding market definition. There is no question that XYZ and other CAPs must take business from RBOC and, therefore, compete with the LEC in some respects. Since telecommunications has historically been a franchised monopoly, all traffic was carried by the state regulated provider. It does not necessarily follow, however, that entrants to the market providing a differentiated service to a subset of the utility's customers are in the same antitrust market with the utility.

CAPs are at the very least a "submarket" of the local telecommunications market. By choice, CAPs do not compete across the entire spectrum of products or customers. The nature of their business plans which focus on state-of-the-art equipment and a high level of customer service are incompatible with the needs and willingness-to-pay of the majority of telephone subscribers.

CAPs, especially in new markets, recognize that their service frequently replaces that provided by the LEC. But this does not put them in the same antitrust market because their product is not reasonably interchangeable with that of the LEC.

A practical example of "competition" between products in different markets is the story of Southwest Airlines. Herb Kelleher, President of Southwest, has always held that, in the early days of the airline, his competition was people driving their cars and that, to be successful, Southwest had to convince these people that his airline was a viable alternative. So too, CAPs must convince users of RBOC's unreliable, technologically backwards services (their "cars") that it is to their advantage to switch to

¹² See *Olin Corp. v FTC*, 986 F.2d 1295 (9th Cir. 1993), cert. denied, 113 S.Ct. 1051 (1994), P. 1300.

¹³ As demonstrated in our report, QRS would still have the lowest cost system and its competitors higher costs. Market price, therefore, will be permanently higher than would have been the case if all competitors had equal Access, hence similar system costs.

the high reliability, faster, more technologically advanced service they offer (the plane). However, this does not mean that Southwest is in the same antitrust market with Interstate 10 or that XYZ is in the same antitrust market with RBOC.

Section 2.7 - Guy's Recitation of Potential Competitors is InAccurate

Pricing can be disciplined because of actual or potential competitors. In his report Dr. Guy repeatedly points to the number of firms that have or could build the facilities necessary to enter the CAP market. It is obvious that real competitors are far more effective than fictional ones but even among the fictional, Dr. Guy's cast is particularly ephemeral:

- The FCC has suspended issuing radio licenses in the 31 GHz band, the type of service which Dr. Guy states could be used to build a wireless CAP network. XYZ, XYZ's parent, has several thousand of these transmitter/receivers which they intended to use in Our Town but which are now simply collecting dust for want of a license.
- Local cable companies have been "talking" about entering the telephone business for many years. In point of fact, none has entered the Our Town market nor has any announced an intention to do so in the near future. TCI, the cable franchise in Our Town, has experienced severe financial difficulties in recent years and has put on hold its expansion into telephony while it deploys its financial resources to protect its core business from direct broadcast satellite, over the air cable and other threats.
- Satellite is not a substitute for land-based CAP service. It is expensive in most applications, is affected by weather and is simply not widely deployed at this time.
- Cellular radio and PCS are not even remote options to CAP service. Cellular is expensive, has limited bandwidth and provides poor transmission quality. PCS has a bandwidth of only 13000 bps so that it would take 5 PCS channels to equal a DS0 (standard data line) and 118 to equal a T1 or DS1.
- Dr. Guy's observations about IXC's being potential competitors is particularly off point in this matter since: 1) they did not receive this authority until late 1996; 2) the "competition" to which he points is for local telephone service (POTS) not high bandwidth services; 3) Capital constraints pose significant barriers for the foreseeable future for facilities based competition by IXCs; and 4) it is not possible for any "competitor" to offer CAP service by leasing fiber from the LEC if the LEC does not have fiber to lease.

The most telling point however, is that none of the firms that Dr. Guy cites has entered the CAP market nationally on any significant scale and none are in Our Town. Again, Dr. Guy has concocted a make believe market: a mythical place, populated by mythical competitors sometime in the future.

Dr. Guy's market bears little resemblance to Our Town and therefore his conclusions based upon the examination of this market are irrelevant to the specific actions of his client and its coconspirator Power Co., in Our Town in 1994 and 1995.

Section 2.8 - Guy Repeatedly Cites Non-existent or Irrelevant Evidence

On page 21 of his report Guy states, "There is a substantial body of evidence to support a finding that RBOC is part of the relevant market." He then asserts that CAPs and RBOC "make business decisions out of concern that customers may switch from one provider of telephone service to the other." However, he fails to cite any instance of such a decision. This "evidence" is similar to his hollow argument regarding switching in response to a price increase, discussed above.

He also makes arguments regarding the competition between CAPs and the LEC in New York, Chicago and other first tier cities. These arguments are also irrelevant to the Our Town market. Dr. Guy's story of emerging nationwide competition between all forms of telecommunications carriers in the post Telecom Act of 1996 world is triply irrelevant: it relates to a broad panoply of services including POTS, entertainment, long distance and Access; in the future; worldwide. This case is about high speed digital services in Our Town in 1994 and 1995.

Section 3 - Essential Facility

XYZ has pled violations of both Sections 1 and 2 of the Sherman Act in its counterclaim against QRS. In arguing that Power Co.'s poles are not an essential facility, Dr. Guy addresses only part of XYZ's Section 2 claim. His arguments have no bearing on XYZ's other antitrust claims.

Dr. Guy has taken the position that Power Co.'s poles are not an essential facility to which a competitor in the CAP market must have Access. He first argues that since QRS was the only CAP to respond even in part to the Power Co. RFP, Our Town CAPs themselves must not have considered Access "essential." He then goes on to cite four criteria of an essential facility under *MCI Communications Corp. v. AT&T*¹⁴ and purports to show that a Power Co. pole attachment agreement does not meet any of the criteria. A finding of an essential facility generally requires that all criteria be met. All of Dr. Guy's arguments are without merit.

Section 3.1 - All Potential Our Town CAPs Sought Access To Power Co.'s Poles

Dr. Guy's assertion that CAPs wishing to enter Our Town did not consider Power Co. pole attachment agreements essential is false and clearly contradicted by overwhelming evidence. The

¹⁴ 708 F.2d 1081 (7th Cir.), cert. denied, 464 U.S. 891 (1983).

basis for Guy's statement is that only QRS chose to respond, even partially, to the Power Co. RFP. Dr. Guy's assertion is false for a number of reasons:

- Other CAPs did not respond to the RFP because they could not economically meet Power Co.'s stated minimum requirements, not because they did not need pole Access.
- Several "non-bidders" including XYZ wrote Power Co. expressing an interest in working with Power Co..
- XYZ had expressed interest in Access to Power Co. poles as early as March - April 1994. As noted in our report, Power Co. told XYZ prior to XYZ submitting a "no bid" that a pole attachment agreement was separate from the RFP.
- Even QRS did not meet Power Co.'s requirements. Indeed QRS stated in its "Response" to Power Co.'s RFP, "We find it hard to imagine a prudent Competitive Access Provider agreeing to all Power Co.'s RFP requirements."¹⁵
- No CAP began construction in Our Town outside of the downtown IXC loop until a pole attachment agreement was acquired.
- The structure of the RFP, as we point out in our report, indicated that the winning bidder would provide dark fiber to competitors at a reasonable rate. Therefore, there was no reason to think that failing to respond to the RFP would preclude market entry.

Our report provides a detailed examination of this issue which comprehensively rebuts Dr. Guy on this point.

Section 3.2 - QRS Was A Monopolist

Dr. Guy states that since QRS was not and could not be a monopolist in Access services, RBOC was dominant, the argument is ended. However, if the relevant product market is CAP service, then QRS' exclusive right to use Power Co.'s poles does create a monopoly in CAP service. There is no question that the agreement with Power Co. gave QRS a monopoly on pole Access for providing CAP service for a period of nineteen months. In fact, QRS' competitors were denied Access by Power Co. because of the QRS exclusive.

¹⁵ BFT 2163

Section 3.3 -There Were No Practical Alternatives To Power Co. Poles

Dr. Guy cites several alternatives to a Power Co. pole attachment agreement that he claims CAPs had available to construct their networks. Among these are:

- Use TCI's right-of-way. However, he fails to mention that TCI's system was limited and that to use TCI's right to attach to Power Co. poles would have required, at the very least, that XYZ partner with TCI and give up its autonomy. It is also not clear that TCI would have been able to use its pole attachment rights under the Pole Attachment Act (47 U.S.C. § 224) to extend its cable system to provide CAP service. Under *Texas Utilities Elec. Co. v. FCC*,¹⁶ a leading case on this issue, a cable company does not have the right to extend its system for non CATV purposes at FCC mandated pole attachment rates.¹⁷ Therefore, Dr. Guy is very likely wrong about the TCI option. In any case, the issue is clouded enough to have geABCDted protracted and expensive litigation before the FCC and the courts.

Notwithstanding all the above, Guy also assumes TCI would be agreeable to such an arrangement in spite of agreements it already had in place on a national level with other potential partners. He has also ignored the fact that financial problems have put TCI's telephony ambitions on hold.

- Use wireless systems. As noted above, systems such as Winstar either do not work or are not available (38 GHz). They require line-of-sight antennae installations, visible from the street, which are not always available. At a minimum, extensive roof rights would be required. More problematic, probably fatal, is that MCI and AT&T do not permit the use of wireless connections for special Access circuits serving their customers.
- Resale of RBOC facilities. This suggestion is preposterous for several reasons. First, there was no such resale available even in theory until the Telecommunications Reform Act was passed in 1996. Second, RBOC does not have extensive fiber facilities available in Our Town. Third, it is not generally economic to resell utility facilities since they are priced at a small discount from retail tariff rates which are substantially in excess of a reasonable cost. Fourth, there are significant problems with providing digital service through unbundled local loop including distance limitations, physical collocation in U.S. West central office and signaling problems.

Dr. Guy takes particular note of XYZ's negotiations with SW Gas and asserts that abandoned Gasco lines would have provided a reasonable alternative to Power Co. poles. He claims that XYZ's unwillingness to pay a reasonable price for the facilities and relieve Gasco of environmental liability

¹⁶ 997 F.2d 925 (D.C. Cir. 1993)

¹⁷ See especially pages 934-5

concerns caused these negotiations to fail. All of these points are demonstrably incorrect and contradicted by the record in this matter.

First, as our report notes and Randy zzzzzzzs testified in his deposition, Gasco found only seven sections of abandoned line that might be usable to XYZ.¹⁸ Several of these were off the XYZ route map and some were not usable for other reasons. Therefore, Gasco was not a viable alternative.

With regards to XYZ's willingness to pay for usable pieces of abandoned pipeline, XYZ made several offers during the course of the negotiations and Gasco never responded with a counter offer.¹⁹ No one, and especially not Dr. Guy, knows the price Gasco required. All that is known is that XYZ tendered a final offer of \$6 per foot, over \$31,000 per mile²⁰; equivalent on a mileage basis to \$1500 per pole. Gasco wanted to defer price negotiations to the conclusion of discussions which never occurred as Gasco was apparently unwilling to deal at any price.

Finally, Dr. Guy claims that negotiations with Gasco broke down because XYZ was unwilling to relieve the buyer from liability regarding environmental and public safety concerns regarding the lines. Guy quotes in his report a hold harmless clause to which Gasco objected. Had Dr. Guy more carefully examined the record, he would have found that the clause in fact was removed by XYZ²¹ and that the real stumbling block was the gas company's fear that, because the location of the line was poorly marked on maps, someone might cut into the cable disrupting communications and leaving Gasco open to lawsuits.²² This was the reason that Gasco corporate refused XYZ an agreement.

Section 3.4 - Guy Is Mistaken Regarding The Relative Cost of XYZ's Our Town System

As a matter of theory, Dr. Guy's assertion that the cost of XYZ's Our Town system compares favorably with the cost of other CAP systems in the U.S. is irrelevant. XYZ wished to compete in Our Town and the relevant cost to that competition is the cost of its competitors in Our Town, not a firm in Dallas or New York which is not in the relevant geographic market. Guy's cost analysis, like much of his report, inaccurately mixes different times and places and exhibits a failure to know or understand the facts of this matter. As I am sure Dr. Guy is aware, unlike Our Town there are no utility poles in Chicago's loop or downtown Dallas and utilities are buried in common conduit.

¹⁸ Deposition, pp 110 -13

¹⁹ OrXYZnghaus deposition, pp 132-39.

²⁰ Dr. Guy is incorrect when he asserts that exclusivity was a barrier to an agreement between Gasco and XYZ. The exclusivity provision was removed. See OrXYZnghaus deposition pg. 128.

²¹ See Dep Exhibit 382, Gasco0022

²² OrXYZnghaus deposition pp. 105 -106

Even if Dr. Guy's comparisons were relevant, they are simply incorrect. In his report he presents a disjointed mix of costs representing vastly different systems. He compares XYZ's preliminary estimate of labor only costs²³ to various estimates of CAP system costs which include engineering, fiber, electronics, building entrances and even a switch. For example, his estimate of \$xxx per route mile for XYZ is for labor only.²⁴ The QRS number to which he compares this, \$xxx, is a total system cost number which also includes engineering, fiber, electronics, building entrances and a switch.

Had Dr. Guy examined XYZ814, he would have found a much higher estimate of XYZ's construction costs (which still does not include engineering). From NDC 200, he could have determined that the actual cost of construction and engineering alone (no fiber or electronics) for the xx mile downtown loop (which includes the laterals to the IXCs and the Evans hub) was \$x million. The closest comparable figure to XYZ's \$xxx per mile is QRS' cost of \$xxx per mile.²⁵

An additional oversight by Dr. Guy is that a report by XX Consulting Group noted that XYZ's Our Town system might be the most expensive system that XYZ was building or planned to build.²⁶ Furthermore, if "buried cable may also be a preferred alternative," why didn't QRS use it to construct its system? The evidence in this case shows that QRS used Power Co. facilities for all but a few feet of its network.²⁷

Section 3.5 - QRS' Actions Would Have And Did Hurt Competition

Dr. Guy has taken the position that QRS' monopolization of pole Access would not have harmed competition in the relevant market because:

- If QRS had become a CAP monopolist, QRS and RBOC would have become vigorous competitors.
- Innovation and the emergence of wireless competitors would have restrained QRS' pricing.
- Power Co.'s bidding process was likely to result in the low cost competitor, QRS, receiving exclusive Access.

²³ XYZ3271

²⁴ XYZ3271

²⁵ See deposition of John Love, p. 233.

²⁶ John Warta e-mail 10/19/95, XYZ3926

²⁷ Deposition testimony of John Love, pg. 131-34, 143-44.

- Under the Merger Guidelines, if entry can occur within two years of a merger, the merger is found not to harm competition.²⁸

The issue of RBOC competition has been discussed previously as has competition from new technologies and wireless carriers. Even if one were to assume contrary to evidence that QRS and RBOC are in the same relevant product market, it does not follow that the resulting duopoly would have any less onerous implications for competition. As I am sure Dr. Guy realizes, the outcome of a stable duopoly is similar to that of monopoly - high prices and reduced output. This is because the two firms in a duopoly are well aware of the response of the other firm to any change in price or output. Because of this, duopolists (and oligopolists to a lesser degree) behave like monopolists and duopoly markets tend to suffer from the same ailments as monopoly markets. Mergers and agreements creating stable duopolies have long been recognized to have anticompetitive consequences. The experience of this country in the cellular telephone market is but one example of the fact that stable duopolies do not lead to competitive market prices or product innovation.

Dr. Guy's analysis of the Power Co. bidding process is incorrect and, even if it were correct, the conclusion that he reaches does not follow as a matter of textbook economics. As discussed at length in our report, the Power Co. bidding process was not likely to result in the highest price received because it assured that the winning bidder would pay no more than Power Co.'s reservation price. There was no bidding process, it was a negotiation between two parties one of which, QRS, had superior information. Guy's argument that Power Co.'s process was rational because it sought to minimize the cost of the system is without any evidentiary support and seems a post hoc rationalization developed by Dr. Guy.

Even if QRS were the lowest cost provider, it does not follow that it would charge the lowest rates if it obtained a monopoly. A monopolist raises prices to the point which maximizes profits (the point at which marginal cost equals marginal revenues). Given that the incremental cost of adding additional customers to the system is essentially zero, price would be set on the market demand curve, and demand curves are unaffected by the cost of the production. Any monopolist would charge the same rates.

With regard to the timing of entry, this again addresses a merger which by definition must have some procompetitive effects. There is no countervailing consumer benefit in the case of monopolization. Furthermore, as demonstrated in our report, there are enduring anticompetitive effects to QRS' preferred pole position as the actions of Power Co. and QRS have permanently raised the relative cost of QRS' competitors facilities and, therefore, market price. Finally, if Guy is correct then any anticompetitive practice is sanctioned so long as it lasts less than two years - another extravagant assertion on his part.

I would also like to point out that Dr. Guy's report does not address the issue of the higher costs to other Our Town CAPs resulting from QRS's preferred facilities Access and the clause in its contract

²⁸ According to the court in *U.S. v. Olin*, op cit., the period is one year

which requires that Power Co. charge other CAPs "equivalent value." As I pointed out in our original report, other CAPs have received inferior benefits but have been required to pay the same fee as QRS. Since other CAPs have higher costs and market price is set on the basis of the highest cost provider, the cost of CAP service in Our Town is probably higher than it otherwise would be.

Section 3.6 - There Were No Valid Business Reasons For The Power Co./ QRS Arrangement

Guy asserts that:

There appeared to have been valid and strong business reasons for controlling the number of companies that had pole attachment rights and for Power Co. to earn as much revenue from those pole attachment rights as possible.

He then enters into a confused recitation of public utility ratemaking practices which are unrelated to the duty of all firms to secure the best possible returns for their shareholders. Dr. Guy also recounts Power Co.'s flirtation with bankruptcy caused by its former CEO's decision to build excess capacity, hide the financial consequences of that action from regulators and investors and finally, engage in an end game in which he sought to spin off valuable assets and contracts into a firm owned and controlled by himself (Crooked Deal) and other hand-picked executives while leaving the utility bankrupt. This course of actions led to the PUC finding Power Co. to be imprudent and disallowing the costs of excess capacity in rates. It also led to a securities fraud suit against Power Co., John Dillinger and others.²⁹

Though all of this makes for an interesting story, especially if told by one knowledgeable about the facts of the case, it is simply not relevant to Power Co.'s actions. As we show in our initial report, Power Co. would have received the maximum price for its property if it had simply rejected QRS's bid as unresponsive and put the terms of the QRS offer out for rebid. This probably would have been illegal since it would have created a CAP monopoly and would have been undone by the Telecom Act of 1996, but it would have fetched the highest price available.

The idea that regulation allows a regulated firm to violate the antitrust laws with impunity is ridiculous and known to be fallacious by both antitrust economists and attorneys. Utilities have been found to be in violation of the antitrust laws in numerous instances including withholding an essential facility.³⁰ The fact that Power Co. was financially challenged and might have trouble meeting its public utility obligations absent its conspiracy with QRS is not a defense against conspiracy to monopolize. The argument proffered is no different than saying that the poor should have a right to steal because they need the money.

²⁹ A copy of a paper on Crooked Deal is contained in Appendix 2.

³⁰ Examples are Otter Tail Power and Great Western Directories v. Southwestern Bell

Dr. Guy's argument that Power Co. had a reason to control pole Access is discussed in our initial report - - it did not and the CAPs did not run into each other on the poles once all gained Access. Finally, QRS was not the only CAP to offer Power Co. fiber; XYZ did.

The clearest indication of Power Co.'s reasoning in deciding to limit facilities Access to a single firm is provided by the testimony of Susan Wallach, Power Co.'s former Vice President of Corporate Planning:³¹

Redacted

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Section 3.7 - Power Co.'s Poles Meet All The Conditions Of An Essential Facility

In our report in this matter, we provide a lengthy discussion of pole attachment regulation by state public utility commissions and the FCC. It has been long standing policy that utility poles are an essential facility and administrative agencies have historically taken action to prevent them from being used to protect or extend monopoly by utilities. Unfortunately, as noted by Dr. Guy, markets frequently move faster than administrative regulations and monopolists can often secure improper advantage before regulators can block them. Where this has happened, the antitrust laws have been used as a remedy.

Dr. Guy simply makes no cognizable argument for his position that the poles were not an essential facility. As a matter of geography, there was no way to reach most Our Town area businesses at a cost which allowed service to be offered to those businesses without Access to Power Co.'s poles, especially in competition with a company that had a pole agreement. The simple fact remains that no Our Town CAP constructed a complete system until it had secured an agreement for facilities use from Power Co.. Either Dr. Guy or the managers of these CAPs is right -- both cannot be.

Section 4 - Antitrust Injury to XYZ

The final points in Dr. Guy's report suggest that XYZ was the victim of its own corporate plans rather than a conspiracy between Power Co. and QRS. In other words, even if Power Co. and QRS conspired to harm XYZ, in the final analysis it did not matter because:

- The City of Our Town would not allow XYZ to deviate from its filed route hence it could not construct a viable network
- XYZ did not have adequate financing to build its network.

³¹ Preliminary Injunction testimony, page 35.

- There is no first mover advantage to be lost to a CAP.
- XYZ did not develop a sensible business strategy to enter Our Town.

The last point is simply a restatement of his cable option, discussed above. Dr. Guy seem to believe that the best method to achieve market entry is to partner with a cable company. He points out that Teleport Communications Group has used this approach but his quote "TCG, **unlike some other CAPs**, leverages off the broadband infrastructures of its cable owners and cable affiliates" [emphasis added] belies his point. Clearly, TCG is the exception not the rule and TCG is owned by the cable companies whose facilities it uses. Also a telling point is that his own client QRS, though founded by a cable operator, has not followed this strategy and has built stand alone systems.

With respect to interference from the City of Our Town, though it is true that the City restricted XYZ from deviating from its route plan beginning in the summer of 1995, there is no basis for suggesting that XYZ had any problem getting route deviations before that time. Eric Nelson, XYZ's Our Town Manager during the early construction phase, testified that there were no problems getting route deviations, and in fact the City granted route deviations, prior to the summer of 1995.³² Thus, but for the Power Co./QRS conspiracy, XYZ could have obtained deviations and completed its system before the COT changed the rules for granting licenses and tried to secure higher fees from XYZ.

Dr. Guy's claim that financing was a problem illustrates another case of selective reading of the record. To make his point, he quotes a memo written by Matt Wetzel. Mr. Wetzel was a XYZ staff member in his early twenties, not a decision-maker in the organization. Earl Kamsky, President of XYZ, testified in his deposition that XYZ had the funds available without the xxx agreement³³ to construct the Our Town network. In his deposition, Mr. Warta testified that XYZ had x million to fund Our Town and two other cities in 199x and that the XYZ board committed those funds to Our Town in 199x. This funding would have been adequate to construct the x CAP (no switched services) systems planned.

Dr. Guy's claim that there is no first mover advantage in the CAP business contradicts all testimony in this case and is geABCDlly inconsistent with economic theory. John Shapleigh testified in the preliminary injunction phase of this litigation on September 22, 1995 that:³⁴

³² Eric Nelson deposition pp. 195-97; 204-05

³³ Dr. Guy seems to be confused about the nature of the Tomen agreement. Tomen is the "take-out lender" to XYZ and provides funding after projects are completed, not for construction. This confusion extends to his observation regarding the May, 1995 XYZ Board meeting. That meeting only concerned the Tomen debt financing for Our Town, not the decision to go forward which had been made long before. (Warta dep. pp 18, 332)

³⁴ Page 8-9, 22

Q. Is being later than other people a disadvantage specifically in this industry?

A. Yes, it is, quite definitely.

* * *

Q. Now looking at all of these elements of damage that you have described, now obviously you told us you cannot quantify them, it's not possible to quantify them but can you give us a reasonable judgment of the magnitude or likely magnitude of these damages? Are we talking tens of thousands, hundreds of thousands, millions of dollars as reasonable expectation for what those damages would be flowing from the delay in Brook's ability to commence and complete its construction?

A. Well into seven figures; into the millions.

Mr. Shapleigh's testimony confirms a saying in the CAP industry, "First CAP wins" and is supported by the deposition testimony of Fred Joyce, QRS's consultant in Our Town.³⁵ Though our analysis of damages in this matter does not include any for loss of first mover advantage, XYZ was clearly damaged in this fashion. That Dr. Guy would suggest that such an advantage does not exist indicates a lack of knowledge of the industry and lack of familiarity with the testimony and documentary evidence in this case.

Section 5 - Conclusion

Alan Guy of ABCD has presented a report in this matter that is confused, poorly focused and distorts or misstates the facts of this case. It is devoid of original analytical content, economic theory or antitrust analysis. Though I have not attempted to rebut every argument he makes in this rebuttal report, I believe that all of his arguments are in fact refuted either here, in our original report submitted in this matter or in the discovery record.

Christopher C. Pflaum says that he is the President of Spectrum Economics, Inc., that he has read such report and is familiar with the contents thereof, and that the facts set forth therein are true and correct to the best of his knowledge, information and belief.

CHRISTOPHER C. PFLAUM, Ph.D.
JUNE 13, 1997

³⁵ Page 93

Appendix 1

Expected Return On Investment

QRS Our Town Investment

QRS Fiber' (QRS) business plan for the Our Town market dated March 24, 1995, contains cash flow estimates which imply "super-normal" equity rates of return. As shown in its business plan, QRS anticipated an annual internal rate of return (IRR) between 33.9% and 46.3% for its Our Town investment, depending upon the income valuation multiple assumed in the year 2000 (i.e. a multiple ranging from 9 to 13 times operating income). However, QRS's analysis contains two errors which cause these rates of return to be understated.

First, QRS incorrectly calculates IRR as the rate of appreciation of an equity investment from the time of investment to an estimated terminal value 5½ years into the future (from mid-way through 1995 until end of 2000), presumably under the assumption that the venture could be sold at the end of the year 2000 for an estimated terminal value. QRS, however, does not consider any intervening cash flows generated by the project. By only considering an initial investment and terminal value, QRS understates the internal rate of return implied by the proposed venture.

Second, QRS incorrectly calculates terminal value by multiplying estimated cash flows in the year 2000 by a value/capitalization multiple and then discounting the estimated appreciation of equity capital over 5½ years. In doing so, QRS understates terminal value as it capitalizes the cash flow during the year leading up to a presumed sale rather than the cash flow for the first year following a presumed sale. The correct method for calculating a terminal value, as shown in the formulas below, is to first multiply the prior period cash flow by one plus the terminal growth rate and then apply the capitalization rate and discount factor. Alternatively, QRS could have multiplied the estimated cash flow in the year 2001 by the capitalization multiple and then discounted the appreciation by 5½ years.

$$PV = \frac{C_0(1 + g)}{r} \qquad \text{not:} \qquad PV = \frac{C_0}{r}$$

Correcting QRS's calculations for these errors implies an annual internal rate of return between 43.5% and 57.5% for its Our Town investment, depending upon the income valuation multiple assumed in the year 2000. Using a multiple of 10 times operating income, the terminal value multiple used by QRS to estimate the loss from delaying market entry by one year (*BFT 8191*), the estimated IRR for QRS's investment is 47.5%.

Another method of calculating the IRR of QRS's projected Our Town operations is to first calculate the project's IRR excluding financing cash flows (i.e. proceeds from debt and equity financing, and principal and interest payments on debt incurred). The result is an asset rate of return, which financial theory states is equal to the weighted-average cost of capital (WAcc). In this instance, the asset IRR is 21.7% (using project cash flows through the year 2000 and a terminal value of 10 times operating income). Given that QRS's business plan assumes a 10% cost of debt and 72% debt financing, this implies a 52.4% equity rate of return. (Note that this level of debt financing is consistent with the "3-to-1 debt-to-equity ratio" referenced by Timothy Sansom of XYZ on page 54 of his deposition of March 4, 1997.)

As shown above, QRS's business plan implies a super-normal investment return of approximately 50%.

Appendix 2

Paper on Crooked Deal Transaction