

regarding market share as an indicator of market power.¹⁰⁸ The CPUC's analysis of market concentration ratios is predicated on an incorrect assumption which renders its calculation meaningless.

The CPUC erroneously relies upon current market share¹⁰⁹ as an effective measurement of market power.¹¹⁰ Cellular's current market share is the product of past FCC-determined structural conditions which have now been changed or eliminated. Instead of doing a forward looking consideration of wireless

108 See Hausman Affidavit at ¶¶ 20-22, 39-41; see also "Reply of the Bell Companies to Comments on their Motion for a Modification of Section II of the Decree to Permit Them to Provide Cellular and Other Wireless Services Across LATA Boundaries," dated September 2, 1994, at 43-51, attached hereto as Appendix F.

109 The CPUC claims that stable market shares demonstrate a lack of competition. The CPUC has relied on confidential data to support this claim, effectively denying the affected parties a right to respond. However, information independently obtained by industry experts demonstrates that market shares in California between cellular carriers have varied more than in highly competitive industries. Hausman Affidavit at ¶ 20.

110 Indeed, the CPUC itself has recognized that

"[t]here are potential problems with use and measurement of market share which must be guarded against. One problem is that current market share within the telecommunications arena is a static measure in what is a very dynamic industry Theoretically, a dominant firm will behave exactly like a competitive firm if there is the threat of entry by another firm even if the dominant firm has a large market share." (Emphasis added.) D.87-07-017, 24 CPUC 2d 541 at 557, 560 (1987).

Similarly, in enforcing antitrust laws, the courts have moved away from heavy reliance on market share and have applied a "rule of reason" analysis that incorporates many factors, other than market share, that are important to the competitive process. See Hunt-Wesson Foods, Inc. v. Ragu Foods, Inc., 627 F.2d 919, 924 (9th Cir. 1980), cert. denied, 450 U.S. 921, 101 S.Ct. 1369, 67 L.Ed 348 (1981).

competition including the entire market, the CPUC focuses on market shares of the two current cellular carriers in each MSA.

The CPUC fails to understand the competitive impact of the new market entrants and thus erroneously concludes that the market will still be highly concentrated after the entrance of ESMR and PCS providers.¹¹¹ While the CPUC recalculated the Herfindahl-Hirschman Index ("HHI") considering projections of ESMR and PCS providers share in the market, the CPUC made a fundamental economic mistake in failing to recognize that competition takes place at the margin.¹¹² It is the competition for new customers that sets prices in a market. Thus, relying on overall market shares, when structural barriers to entry have just been removed and new entry has just occurred, is incorrect.¹¹³

The economic factors which determine the competitive impact of a new entrant are whether (1) new customers will find the new entrant's service acceptable (demand elasticity) and (2) the new entrant can supply sufficient capacity to compete for a significant proportion of the new customers (supply elasticity).¹¹⁴ Based on market evidence from the U.K., demand acceptance already exists for PCS. Similarly, Nextel's studies have

111 Petition at 78.

112 Petition at 75.

113 Hausman Affidavit at ¶ 40.

114 Hausman Affidavit at ¶ 42.

demonstrated consumers are attracted to its offering.¹¹⁵ Moreover, both Nextel and PCS providers will have more than enough supply capacity to serve all new customers, given their digital networks which have four to twelve times the capacity of current cellular analog networks.¹¹⁶ Thus, the CPUC's reliance on HHIs is an incorrect approach to determine the likely future competitive effects of Nextel and PCS in California. The usefulness of an HHI is limited for the wireless marketplace because of the rapidly changing technology and new entry.¹¹⁷ An appropriate calculation of HHI demonstrates that the new entrants from ESMR and PCS will have more than sufficient capacity to create sufficient competition so that regulation is unnecessary.

The CPUC also uses the HHI calculation to conclude that facilities based carriers are gaining market share and that resellers are losing market share.¹¹⁸ This calculation is wrong because it is fundamentally incomplete. It does not take account of all of the players in the cellular retail marketplace. Resellers are essentially one form of cellular distributor. In recent years, other entities, including large retail chains like Circuit City and Good Guys, have entered that

115 See, e.g., "Fleet Call Becomes NEXTEL, New Company Name Reflects New Business Designed to Serve Broader Wireless Communications Market," Business Wire, dated March 24, 1993, at 4.

116 The actual amount of overall capacity will depend on how much spectrum each provider controls.

117 Hausman Affidavit at ¶ 42.

118 Petition at 31-34.

market, and are now the most efficient distribution method for cellular CPE and service. Early on in the history of cellular, resellers had a competitive advantage selling service to their car phone and paging customers. However, once cellular became a mass market product, mass retailers with lower overhead costs could offer better prices. It is notable that in MSAs like Chicago, with retail rates 40% less than Los Angeles or San Francisco, resellers have almost no share. The presence of resellers does not indicate anything about competition or cellular penetration.¹¹⁹

4. The CPUC has presented a superficial and misleading analysis of rates which ignores substantial evidence of competition.

The CPUC claims that cellular rates are among the highest in the nation,¹²⁰ while ignoring that it is the CPUC's statutory duty to ensure that rates for cellular service have been just and reasonable.¹²¹ If accepted as true, the CPUC's claim that cellular rates in California are too high is an admission that the CPUC has utterly failed to perform its duty.

119 Hausman Affidavit at ¶ 39. Similarly, as the number of competitors is greater in California than in most of the nation (therefore the HHI is lower in California), Congress' determination that there is sufficient competition to require preemption of state rate regulation certainly must apply to California.

120 Petition at 45-46.

121 Section 6 of Article XII of the California Constitution authorizes the CPUC to establish rates for all public utilities within its jurisdiction. Pursuant to California Public Utilities Code Section 728, the CPUC ". . . shall determine and fix, by order, the just, reasonable, or sufficient rates." See also Cal. Pub. Util. Code § 454 ("no public utility shall change any rate . . . except upon a showing before the commission and a finding by the commission that the new rate is justified.")

The CPUC's claim that prices for cellular service have not declined is based on a biased approach which completely disregarded the evidence presented in the California proceeding. Recent years have seen increasingly aggressive price competition in California markets, resulting in both lower prices and greater consumer choice. The only factor inhibiting further price reductions is the CPUC's regulation.

a. California regulation has increased the price for cellular service.

It is indisputable that state regulation of cellular rates around the nation has led to higher prices. Average cellular prices in the top 10 MSAs show that, without exception, the monthly price for service is higher in regulated states.¹²²

Table 1

1994 Average Cellular Prices in the Top 10 MSAs:
160 minutes of use (80% peak)¹²³

<u>MSA No.</u>	<u>MSA</u>	<u>Monthly Price</u>	<u>Regulated</u>
1	New York	\$110.77	Yes
2	Los Angeles	99.99	Yes
3	Chicago	58.82	
4	Philadelphia	80.98	
5	Detroit	66.76	
6	Dallas	59.78	
7	Boston	82.16	Yes
8	Washington	76.89	
9	San Francisco	99.47	Yes
10	Houston	80.33	

The average price of regulated MSAs in the top 10 markets is \$98.10 while the average price of unregulated MSAs is \$70.59.

122 Hausman Affidavit at ¶ 9.

123 This usage, 160 minutes per month with 80% peak and 20% off peak, is the approximate average usage of cellular customers.

Accordingly, consumers in regulated states are paying an average of \$27.51, or 39%, more per month than consumers in unregulated states¹²⁴ for the same service.¹²⁵ Similarly, an analysis of cellular prices in the top 30 MSAs, accounting for the relevant factors, demonstrates that regulated states have cellular prices 23.6% higher than unregulated states.¹²⁶ Regulation is the major factor associated with higher prices, accounting for 15% of the differential.¹²⁷

Regression analysis for the top 30 MSAs conducted over the past five years has consistently shown that cellular prices in regulated states, holding other economic factors constant, are 5-15% higher than in unregulated states.¹²⁸ Five California MSAs are in the top 30 MSAs: Los Angeles, San Francisco, San Diego, San Jose and Sacramento, representing approximately 75% of California's population.¹²⁹ Thus, over 75% of California's population has paid significantly higher cellular prices, amounting to an estimated \$240.5 million per year, resulting from the CPUC's regulation.¹³⁰ The CPUC is simply unwilling to face this unfortunate reality. It is reduced to ineffective

124 Hausman Affidavit at ¶ 9.

125 Ibid.

126 Id. at ¶ 11.

127 Ibid.

128 Id. at ¶ 12.

129 Id. at ¶ 13.

130 An identical analysis conducted by Professor Hausman with regard to RSAs reveals similar results. Hausman Affidavit at ¶ 16.

data manipulation to try to support its assumptions regarding the impact of its regulation.¹³¹ The CPUC has selected Sacramento, the only market in California constrained by a low price cap. The Petition then compares the heavily regulated Sacramento market (the nation's 30th largest market) with the unregulated Philadelphia market (the nation's fourth largest market) which happens to have the highest rates for an unregulated market. As discussed supra, rates in the Sacramento market are the result of an arbitrary decision by the CPUC to refuse to grant a rate increase, despite evidence of negative profits of the carrier. Significantly, the CPUC does not and cannot explain why Philadelphia's high unregulated rates are still \$18.49 less expensive per month than San Francisco.

At bottom, there is no basis for the CPUC's claim that "the presence of regulation in California has probably prevented rates from being even higher and certainly has not contributed to higher rates."¹³² The only support offered by the CPUC for this claim is a statement inaccurately attributed to Professor Alfred Kahn.¹³³ In fact, Professor Kahn actually stated that:

We know that economic regulation often does more harm than good, especially when it suppresses competition. Now a study of the cellular telephone business by

131 Petition at 45. The CPUC acknowledges that in interpreting price comparisons "a variety of factors contribute to the comparatively higher rates." Despite the recognition that these factors are relevant, the CPUC assumes that lack of competition is the cause. D.94-08-022 (mimeo) at 43. The rate analysis conducted on behalf of AirTouch considers the relevant factors. Hausman Affidavit at ¶¶ 10, 11.

132 Petition at 46.

133 Id. at 46, n.27.

William Shew of the American Enterprise Institute finds that while competition has been consistently effective in reducing rates, the rates are marginally higher in states that regulate them than where they don't. . . . It doesn't make much sense to regulate cellular at all. It's not a necessity like electricity. And cheap ordinary telephone service is always available as an alternative.¹³⁴

b. Contrary to the CPUC's assertion, cellular rates in California declined.

The CPUC admits--as it must--that cellular rates in California have declined over time as the CPUC granted limited pricing flexibility.¹³⁵ The overwhelming majority of AirTouch's customers subscribe to plans which offer a discount off the basic plan. Approximately 80% of AirTouch's customers in the Los Angeles market subscribe to discount plans. There has been a similar migration of customers from basic to discount plans in other markets.¹³⁶ Contrary to the CPUC's claims these

134 See Statement of Professor Kahn, attached hereto as Appendix G. Professor Kahn also stated that Shew's study indicated that because rates were higher in those states that had absolutely outlawed cellular rate regulation--as compared to those states that had chosen not to exercise it--"states should not give up the threat of regulation, but neither should they actually impose it." Id. By denying the CPUC's Petition, the FCC will create this optimal situation, as the CPUC will still have the threat of regulation (by being able to get such authority, if necessary, pursuant to Section 332(c)(3)(A)), but it will not actually be imposing such rate regulations.

135 Petition at 34. See Appendix H submitted herewith describing AirTouch's advice letter filings reducing prices 1990-1994.

The CPUC generally focused upon "nominal" cellular prices and not "real" rates as adjusted for inflation (Petition at 35, n. 14) because the CPUC was "uncertain which inflation rate is appropriate." Accordingly, the CPUC chose not to use any rate, resulting in a substantial understatement in the magnitude of price reductions enjoyed by consumers. See also Hausman Affidavit at ¶ 18.

136 See Appendix I attached hereto.

plans do not merely "purport" to offer savings. They do in fact reduce the customers' bill as the CPUC concedes: "for most classes of customers in most urban markets the best rates offered through discount plans were lower than those offered by the basic rate."¹³⁷ As the CPUC has granted limited pricing flexibility, AirTouch has offered a variety of innovative pricing programs,¹³⁸ including:

- special rates for occasional and off-peak users
- lower rates for long-term users
- packaged plans that discount air time for minimum usage
- reduced roaming rates
- promotional discounts resulting in free airtime and waiver of activation fees
- discounted emergency preparedness plans
- neighborhood and second phone plans
- billing service options
- government rates
- discounts for multiple unit accounts
- lower rates for volume resellers and bulk users

This month AirTouch introduced its Super Value Starter Plan with a promotional offering that includes monthly access and 20 minutes of use at \$29.99 per month.

The only factor inhibiting more innovative plans providing greater discounts has been existing regulation. A comparison of the change in prices for the three usage levels relied upon by the CPUC reveals that prices have decreased more rapidly in unregulated states than regulated states.¹³⁹ From 1985-1994, prices decreased by an average of 7% in California MSAs, while

137 Petition at 43. At best, the CPUC has found its "analyses" of these plans was "inconclusive." Petition at 36.

138 See Appendix J attached hereto.

139 Hausman Affidavit at ¶ 18.

prices decreased by 17% in unregulated MSAs.¹⁴⁰ Thus, not only are prices higher in regulated states, they are decreasing less rapidly.¹⁴¹

The CPUC's claim that rates have not declined commensurate with costs is simplistic.¹⁴² Rather than conducting a study, the CPUC relies upon a Wall Street Journal article discussing national trends. The CPUC's claim, even if true, does not demonstrate conditions in California are any different than in the rest of the country. Moreover, the claim does not adequately assess the nature of cellular investment.

Finally, the CPUC resorts to the claim that similar prices between cellular carriers "raises questions."¹⁴³ Similar prices are common in cellular markets outside California, and as the CPUC itself has observed, "[i]n a fully competitive market, the prices of individual firms track closely and may even be identical."¹⁴⁴ This fact has often been recognized by the FCC. For example, the FCC has stated that, with regard to cellular carriers, "similarity in price without more may equally indicate vigorous price competition between facilities-based carriers in the same market."¹⁴⁵

140 Ibid.

141 Ibid.

142 Petition at 35, 39.

143 Petition at 35.

144 D.90-06-025 (mimeo) at 49.

145 Bundling of Cellular Customer Premises Equipment and Cellular Service, 7 FCC Rcd 4028, 4034 n.20 (1992), quoting
(continued...)

c. Discount and contract plans have reduced the price of cellular service.

The CPUC cannot deny that the discount plans have lowered rates for consumers. Thus, it is forced to create several rationalizations for its refusal to acknowledge this clear evidence of price competition. None of the CPUC's purported justifications has merit; they do, however, graphically illustrate the CPUC's basic distrust of market competition.

The CPUC assumes that customers have not benefitted from these plans due to the "restrictions and conditions which reduce their value."¹⁴⁶ Consumers can be trusted to make intelligent decisions regarding the length and terms of their service contracts. The significant shift of customers from the basic plans to the discount plans demonstrates that the conditions are perceived by consumers as advantageous. The CPUC admits that "[a]s other plans have been introduced to a price-differentiated market, the basic plans' use has declined."¹⁴⁷ The discount rates have resulted from vigorous competition between cellular carriers and have dramatically increased the number of cellular subscribers throughout California.¹⁴⁸

145(...continued)

Cellular Resale, Notice of Proposed Rulemaking and Order, 6 FCC Rcd 1719, 1725 (1991) citing Turner, The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusal to Deal, 75 Harv. L. Rev. 655, 663-73 (1962).

146 Petition at 36; see also id. at 43.

147 Id. at 40.

148 Submitted herewith as Appendix K is a chart identifying the cellular carriers' discount plans introduced shortly after the CPUC increased pricing flexibility. See also Appendix H.

The CPUC's attack on "long term" contract plans¹⁴⁹ is similarly anticonsumer. Term contracts and similar conditions are routinely offered by cellular carriers in other states and in a number of other competitive industries.¹⁵⁰ The very existence of these plans demonstrates that cellular is already competing against ESMRs and prices are adjusting accordingly. Cellular carriers in Los Angeles, responding to the entrance of Nextel and increased pricing flexibility, decreased their prices by approximately 17% to 22% in the summer of 1993 for customers who would sign one year contracts. The CPUC's claim that the contracts impede the new competition fails to recognize that over 90% of the market is still immediately available to the new entrants. Unlike cellular carriers, the new well-funded competitors, such as Nextel, Cox Enterprises and Pacific Bell, can employ the common marketing tool of packaging service and equipment to attract new customers.¹⁵¹

149 Petition at 43, 45.

150 Courts have upheld such terms and conditions even when coupled with exclusive dealing arrangements. See FTC v. Motion Picture Advertising Service Co., 344 U.S. 392, 396 (1952) (court upheld the use of one year contracts). Courts have routinely rejected the contention that term contracts impose an undue restraint on competition by foreclosing alternative sellers from a portion of the market. See Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 236 (1st Cir. 1983) (court upheld two-year "requirements" contract which gave buyer a discount in exchange for clause that penalized early cancellation, noting the buyer enjoys a stable source of supply and a favorable price for the length of the contract.)

151 Hausman Affidavit at ¶¶ 16, 19, 45.

The CPUC also attempts to undercut this evidence of price declines by characterizing the reductions as "temporary."¹⁵² The discount plans do not offer "temporary" reductions. As with any promotion, the program is offered for a certain period of time. However, the customer has the favorable price for the entire duration of his or her contract with the cellular carrier. Temporary promotional rate reductions are frequently used in other industries, such as the airline industry and are exactly the type of tool used in a competitive environment.¹⁵³ Moreover, the CPUC fails to acknowledge that expiring promotions have been consistently replaced by new promotions. Incredibly, the CPUC relies upon "an industry observer"¹⁵⁴ to support its claim that rate reductions have not been sustained, but fails to disclose that this "observer" is a competing cellular reseller, an entity which has been protected by and benefitted from the CPUC's regulation to the detriment of consumers.¹⁵⁵

d. Interlocking ownership interests have not increased prices.

The CPUC attempts to bolster its claim that there is no price competition by speculating that interlocking ownership interests among the carriers weaken competition.¹⁵⁶ The CPUC, the Department of Justice and the Commission have repeatedly

152 Petition at 40.

153 Hausman Affidavit at ¶ 23.

154 Petition at 39.

155 See Section V.B, infra.

156 Petition at 27-28.

examined and approved such relationships, but have never concluded that such arrangements lessen competition.¹⁵⁷ The CPUC can point to no evidence to support this conjecture.¹⁵⁸ Indeed, the evidence is to the contrary. Similar interlocking arrangements exist in many markets outside of California with low, highly competitive rates.¹⁵⁹ The CPUC cites to the fact that AirTouch and McCaw are partners in San Francisco where they compete with GTE. However, AirTouch and McCaw are also partners in Dallas where they compete with the Block B partnership of Southwest Bell and GTE. As demonstrated infra, Dallas has lower monthly cellular prices than San Francisco.¹⁶⁰ The CPUC has

157 See In the Matter of Application of MMM Holdings to Acquire LACTC via LIN, FCC Opinion, 1989 FCC Lexis 2466 (Nov. 6, 1989) (statement of Commissioner Barrett); In re Application No. 89-08-020 of MMM Holdings for Authority to Acquire LACTC via LIN Broadcasting, D.89-12-056, 34 CPUC 2d 198 (1989); In the Matter of Capitalization Plan of Pacific Telesis, FCC Memorandum Opinion and Order, AAD 5-1213, Mimeo No. 2845 (Feb. 27, 1986); In Re Application of James F. Rill and Pacific Telesis for Consent to Transfer Control of Communications Industries, FCC Memorandum Opinion and Order, 60 RR 2d 583, 592 (Step 2); In the Matter of Application No. 87-02-017 of PacTel for Authorization to Acquire/Control BACTC, D.87-09-028, 1987 CPUC LEXIS 197.

158 In addition, the CPUC's assertions regarding interlocking relationships are in error. Contrary to the CPUC's statement, AirTouch and McCaw are not partners in Los Angeles. Petition at 28. Rather, they are vigorous competitors in that market. Additionally, the CPUC refers to the AirTouch/US West joint venture but neglects to mention that US West will completely divest its San Diego cellular interests before its other cellular interests are jointly operated with AirTouch's cellular properties. Petition at 28.

159 Hausman Affidavit at ¶ 17.

160 See Table 1, supra, at 42. Similarly, BellSouth and LIN (McCaw) are partners in Los Angeles where they compete with AirTouch. In Houston, they are again partners and compete with GTE. Yet cellular prices are significantly less in Houston than in Los Angeles. Hausman Affidavit at ¶ 17.

not demonstrated that interlocking ownership interests have any impact on the price for cellular service in California.

5. The CPUC ignored evidence of high customer satisfaction.

This Commission specifically noted that information regarding customer satisfaction with services offered by CMRS providers is pertinent to determining whether continued regulation is warranted.¹⁶¹ The CPUC itself recognizes, "price alone is not the only measure of effective competition. Effective competition can also be provided by carriers which offer superior service."¹⁶² Yet, its Petition is devoid of any reference to customer satisfaction. In fact, service quality in California is sufficiently high that the CPUC elected to forego setting service standards¹⁶³ concluding that "[e]xperience has shown that cellular providers are willing to provide high-

161 Second Report and Order at 1505.

162 D.93-02-010 (mimeo) at 43.

163 The incentive for such willingness is the carriers' desire to keep the customer from switching to a competitor . . . the quality of cellular service in California is good and . . . cellular carriers have a sufficient willingness to continue and to enhance quality cellular service without implementing any additional regulatory goals or policies. D.90-06-025 (mimeo) at 22.

quality performance."¹⁶⁴ AirTouch's surveys confirm that customers are very satisfied with the quality of service.¹⁶⁵

The CPUC has not even acknowledged the substantial evidence that, despite the decline in prices, cellular customers have benefited from enhanced service quality and an expanding variety of services. Since its inception in 1984, cellular carriers in California have faced and met an extraordinary demand for service. As a consequence, the carriers have invested heavily in research and development of cellular technology to: expand geographic coverage, enhance coverage in difficult terrain areas, reduce interferences and withstand national disasters.¹⁶⁶ Carriers have competed not only based on the quality of service, but also on introduction of product innovations. California carriers, including AirTouch, have introduced new services at a rapid pace, including voice mail, improved automatic roaming, and automatic call forwarding.¹⁶⁷

164 D.90-06-025 (mimeo) at 94 (Finding of Fact 27); see also Ordering ¶ 33. Similarly, this Commission has recognized that ". . . in a competitive market, such as exists in . . . mobile communications services, market forces compel service providers to offer the quality and quantity of products sought by customers." Cellular Auxiliary Service Offerings, 3 FCC Rcd 7033, 7038 (1988).

165 In fact, according to the CPUC's statistics only 73 customers have complained about the quality of service in the Los Angeles market from 1987 through 1993.

166 See Appendix L attached hereto describing the enhancements to the infrastructure by AirTouch.

167 Other product innovations introduced by AirTouch include, among other things, express call completion, long distance access (QuickLink), targeted calling, digital messaging, One-Number Access ("PAEMS"), mobile data, voice mail notification, and wireless PBX.

The continuous development of innovations to enhance system performance demonstrates cellular carriers have competed aggressively.

With the explosive growth of subscribership in California, there is little doubt that cellular service is highly valued and that customer satisfaction has remained high. AirTouch's California subscribership has grown from 15,318 in 1984 to over 800,000 by the end of 1993. Even greater customer satisfaction is likely if cellular carriers are afforded proper incentives for investment through additional market flexibility.

6. The CPUC's analysis of cellular's earnings does not demonstrate market power.

In "evaluating" whether cellular carriers have some "market power"--the CPUC claimed that carriers' earnings were "consistently above competitive levels" and thus "an indicator of market power."¹⁶⁸ As shown below, the CPUC's analysis of this issue, which looked at rates of return, capacity utilization, spectrum value, and "Q-Ratios," is fatally flawed.

a. The accounting rates of return relied upon by the CPUC are not reliable indicators of market power.

The CPUC has presented a simplistic analysis of cellular carriers' returns flatly at odds with its own extensive findings and sound economic theory. Without proper analysis, the CPUC rejects its own conclusions that:

- "[C]ellular earnings data must be interpreted carefully."¹⁶⁹

168 Petition at 46.

169 D.94-08-022 (mimeo) at 54.

- "Accounting rates of return for wholesale carriers do not in themselves reveal whether profits are due to a scarcity of available radio spectrum, uncompetitive pricing, or the ordinary returns on investment that may be earned due to the riskiness of the cellular industry."¹⁷⁰
- "Neither pricing patterns nor profits can indicate directly whether or not cellular carriers are competing fully with each other."¹⁷¹

There is no justification for the CPUC's reversal on this issue.

Accounting depreciation rates are often far different from economic depreciation rates, especially when an industry is growing fast and technology is changing rapidly as is the wireless industry. Failure to take account of decreasing network equipment prices and the use of excessively long depreciation lives leads to a calculated rate of return which exceeds the true economic rate of return.¹⁷² Accordingly, accounting rates of return are often a very poor guide to true economic rates of return.

The wide disparity in returns among the carriers demonstrates that no easy assumptions can be made regarding earnings as a measurement of competition. Assessment of carriers' earnings as an indicator of competition remains problematic due to the rapidly depreciating network infrastructure arising from the conversion to digital, as well as the inherent problems in valuing spectrum.

170 D.90-06-025 (mimeo) at 93 (Finding of Fact 16).

171 D.90-06-025 (mimeo) at 49.

172 Hausman Affidavit at ¶ 26.

A second significant problem in using regulatory rates of return in the cellular industry is the high cost of customer acquisition. Cellular companies offer bonuses or rebates to their sales agents for new customers. These rebates vary widely, but are often in the range of \$100-\$425 per customer.¹⁷³ A portion of the rebates are passed on to new cellular customers in the form of large discounts on the price of cellular telephones. These new customers are an asset to a cellular company since the average customer continues services for around three years and their replacement cost should be included in the cellular company's value which appears in the denominator of a rate of return calculation. Exclusion of the replacement cost of new customers results in a calculated accounting rate of return will overstate the true economic rate of return.¹⁷⁴ The CPUC's simplistic reliance on accounting rates of return does not acknowledge these critical factors.

b. Even the CPUC's calculations do not demonstrate a failure to compete based on excessive earnings.

In medium-sized markets, such as Santa Barbara, and the RSAs, the calculated returns are below a competitive risk adjusted level in 1993.¹⁷⁵ In San Diego the average calculated rate of return is 16.6% and in San Francisco the Block B (GTE) carrier's rate of return is 18.1%. Both of these returns are

173 Id. at ¶ 27.

174 Ibid.

175 Id. at ¶ 31.

competitive.¹⁷⁶ Lastly, the CPUC's calculations for the Los Angeles market demonstrate that the return to the Block A carrier has decreased by 52% over the past five years and the return to the Block B carrier has decreased by 46%.¹⁷⁷ Both prices and returns would likely decrease even more in Los Angeles if the CPUC would no longer exercise rate regulation over these markets.

c. The CPUC's capacity utilization analysis does not consider the mobile nature of cellular service.

The CPUC recognizes that it is difficult to measure economic investment and expansion,¹⁷⁸ yet concludes that carriers are not operating at maximum capacity. Ironically, the CPUC previously found that it was unable to assess capacity accurately and rejected the capacity monitoring program developed in I.88-11-040 on the grounds that the available data was insufficient to evaluate the market.¹⁷⁹ The CPUC now relies upon a simplistic capacity utilization analysis to support its preconceptions.

The CPUC has concluded that carriers are not "serving at maximum capacity" and that "additional customers could have been added to cellular systems had prices been lower."¹⁸⁰ Incred-

176 The Block A carrier does have a significantly higher calculated rate of return, but since competition sets prices at the margin, the greater efficiency of the Block A carrier compared to the Block B carrier has led to its higher returns. Ibid.

177 Ibid.

178 I.93-12-007 (mimeo) at 11.

179 Ibid.

180 Petition at 51, 54.

ibly, the CPUC cites as evidence of excess capacity that the carriers are offering discount plans to attract new customers to fill capacity. These, of course, are the very discount plans the Petition dismissed as no evidence of competition. The CPUC cannot have it both ways.¹⁸¹

The CPUC's analysis relies upon capacity per cell site. This approach is absurd. The CPUC ignores the fact that carriers must construct these networks to meet the most basic characteristic of cellular service, mobility, and the demographics of the various markets. The CPUC fails to consider the capacity requirements of highly congested areas, such as freeway intersections in Los Angeles. Carriers are required to ensure service and thus must build for maximum capacity needs.

Even if the CPUC's analysis of capacity utilization was correct, its claim that prices should drop in light of excess capacity is not.¹⁸² Since rates are set over an entire system, it is difficult to understand how prices could be adjusted down unless all cell sites are underutilized, which is not the case. In a congested market, carriers must provide spare capacity to meet emergency needs. Similarly, there is no support for the claim that cellular carriers are not expanding their system when economically justified. The CPUC has acknowledged the explosive

181 Petition at 54.

182 Petition at 53.

growth of subscribership and there is no question that cellular carriers have invested to meet that demand.¹⁸³

d. The CPUC improperly disregards the scarcity spectrum value of the FCC license.

The CPUC makes a fundamental error in concluding that if spectrum scarcity was the primary determinant of the value of a license, the value would be roughly equivalent nationally. The CPUC ignores the basic economic concept that a resource will be more valuable in a more congested area where demand is higher. Similarly, the CPUC's comparison to a separate industry, broadcasting,¹⁸⁴ is irrelevant since broadcast licensees serve an entirely different market and use 6MHz to operate a TV station.

Consistent with sound economic theory, the CPUC has recognized that in a duopoly, firms may properly earn "duopoly rents" despite intense competition.¹⁸⁵ Nothing has changed to undercut the basis for the CPUC's prior findings regarding cellular returns.

183 See Appendix M, submitted herewith, depicting the expansion of the AirTouch's facilities in its Los Angeles market.

184 Petition at 55.

185 "[W]e recognize that profits may be earned by wholesale carriers due to their FCC-granted right to use scarce radio frequencies or spectrum. It is economically efficient and an appropriate spur to system and service expansion for wholesale carriers to keep those profits." D.90-06-025 (mimeo) at 59.

e. The CPUC erroneously assumes that high market valuations are the result of entry barriers.

The CPUC's claim that cellular returns are not commensurate with the risk¹⁸⁶ is not based on any evidence.¹⁸⁷ There is no basis for a reversal of the CPUC's prior findings that:

- "Absent a risk analysis and a mechanism to measure a reasonable rate of return on cellular investment, there can be no finding that cellular carriers are earning an excessive return on their investment."¹⁸⁸
- "The record does not substantiate that cellular carriers are earning an excessive return on their investment."¹⁸⁹

To claim that the cellular carriers have market power the CPUC refers to a study by Professor Hazlett that claims that cellular carriers have high "Q-ratios" which he claims proves market power.¹⁹⁰ The Q-ratio equals a firm's market price divided by the replacement cost of its assets. However, Professor Hazlett has omitted the significant asset value of

186 Petition at 48.

187 In fact, the CPUC has concluded that investors need incentives to take the risks inherent in development of new technologies:

"[s]ince, by definition, there is no history on which to forecast demand for services which address new markets, investors in advanced telecommunications are often forced to proceed on several fronts with no advance knowledge of which new services will be met with positive consumer reaction."

[CPUC] Report to the Governor, "Enhancing California's Competitive Strength: A Strategy for Telecommunications Infrastructure," dated November 1993, at 10.

188 D.90-06-025 (mimeo) at 50. See also at 99, 101, 105 (Findings of Fact 82-85, 100, 101; Conclusion of Law 20).

189 Id. at 105 (Conclusion of Law 20).

190 Petition at 62-63.

current customers. Customer acquisition costs vary between \$350-500 per customer to cover rebates to agents and other variable costs. Professor Hazlett's calculations ignore this significant investment in customers which are the primary source of revenue for a cellular carrier.¹⁹¹

Moreover, relying on Hazlett's calculations leads to inconclusive results. Even though they have just commenced operation and do not control "bottlenecks," ESMRs have Q-ratios very similar to the cellular carriers.¹⁹² ESMR and PCS are expected to grow at rates similar to that of the cellular industry, 35-40%. The only logical conclusion arising from the similarity of Q-ratios is that investors reward high expected growth with high market prices.

V. THE ONLY CONDITION UNIQUE TO CALIFORNIA IS THE CPUC'S MISGUIDED REGULATION.

Even if the CPUC's Petition was procedurally and substantively sound, a review of the CPUC's past regulation reveals that it does not have the vision to create a progressive framework for competition as required by Congress.

A. The CPUC persists in protecting inefficient competitors rather than competition.

The CPUC's regulation has focused on protecting a select group of competitors, the resellers, by mandating a margin between wholesale and retail service rates. The regulation requires an exact corresponding reduction of each rate element

191 Hausman Affidavit at ¶ 24.

192 Id. at ¶ 25.

in the retail and wholesale tariffs. The CPUC's enforced markup is as high as 38% on access and usage.¹⁹³ This requirement has created both an artificially high profit margin and an umbrella that has insulated the resellers from true competition while increasing rates for consumers.¹⁹⁴ The resellers have had no incentive to offer their own innovative plans since their prices are tied to the carriers' retail offering which must contain the artificial margin. The mandated margin only serves to encourage mimicry and to provide arbitrage opportunities unique to artificial markets. As the CPUC's Division of Ratepayer Advocates recently noted:

"[t]he Commission's attempt to foster competition through the two-tiered wholesale/retail market structure has resulted in a costly and inefficient regulatory burden on carriers, resellers, and Commission staff. . . . [T]his margin requirement only serves to protect the business opportunities of independent resellers who have been 'ineffective in enhancing competition in the cellular market'."¹⁹⁵

Such a mandatory margin is unheard of in other states and in other regulated industries in California.¹⁹⁶

193 D.94-08-022 (mimeo) at Appendix 3.

194 Absent the margin, the spread between wholesale and retail prices would be smaller so that retail prices would be lower, thus benefiting consumers.

195 Division of Ratepayer Advocates Opening Comments in I.93-12-007, dated February 25, 1994, at 4, 25.

196 Elimination of this artificial restriction to pricing flexibility certainly will not harm competitors, as demonstrated by regulation of interexchange carriers. Although interexchange carriers do not develop their price structures within the context of mandatory margin requirements, resellers of interLATA service have been able to compete effectively in California by purchasing in volume and reselling in smaller segments.