

"the cellular sector of the mobile services market continues to be uncompetitive which has perpetuated unreasonably high rates." D.94-08-022 at 5. Notwithstanding those statements, the CPUC had never before concluded that the cellular market was uncompetitive, nor that rates were unreasonably high.²⁷ On the basis of its conclusions regarding competition, the CPUC authorized the filing of the instant Petition at the FCC.

Although D.94-08-022 was passed by a vote of 3-2, there is evidence that the majority does not fully support the policy contained in the decision. In a separate statement appended to the Interim Decision, Commissioner Jesse Knight stated the specific grounds upon which he cast the crucial third vote in favor of the Interim Opinion. First, Commissioner Knight expressed his support for a limited policy of reseller switch unbundling which was confined to NXX codes and LEC interconnection, when in fact the Decision appears to unbundle access charges as well.²⁸ Furthermore, Commissioner Knight's statement indicates that unbundled rate elements would not be subject to rate regulation if the sum of those rates did not exceed the bundled rate. In contrast, the decision can be read to impose price caps on each rate element at its existing levels.²⁹

²⁷ See D.90-06-025, *Supra*.

²⁸ D.94-08-022 Ordering Paragraph 3.

²⁹ D.94-08-022 Finding of Fact 55.

II. THE PETITION OF THE CPUC MUST BE REJECTED FOR FAILURE TO MEET THE STATUTORY REQUIREMENTS FOR RETENTION OF RATE REGULATORY AUTHORITY

The petition of the CPUC must be rejected by the Commission as a result of the failure of the CPUC to establish that the California cellular market is uncompetitive or that cellular rates in California are unreasonable. The economic analysis offered by the CPUC to establish these points is completely incapable of supporting the CPUC's burden of proof. An analysis of the CPUC economic arguments by the economic consulting firm of Charles River Associates demonstrates conclusively that the CPUC's economic arguments are based on faulty evidence and faulty reasoning. At the same time the Carriers Association presents its own set of evidence, including studies of retail rate trends throughout the State of California, which demonstrate a steady trend of declining rates. This evidence fully supports the Carriers Association's contention that the California cellular market is competitive and provides customers with reasonable rates. As a result, the CPUC cannot establish the primary element necessary to sustain its petition for rate regulatory authority.

A. The CPUC's Economic Analysis of the California Cellular Market Is Fatally Flawed and Misrepresents the Competitive Nature of That Market

As outlined above, the fundamental issue raised by the CPUC Petition is a factual question of economic analysis, to

wit: Do market conditions in the California cellular market "fail to protect subscribers adequately from unjust and unreasonable rates or rates that are unjustly or unreasonably discriminatory." Second Report and Order at ¶240. The Carriers Association has exhaustively examined the economic analysis presented by the CPUC, as well as that documentation of its analysis which the CPUC has made public. That examination reveals that the CPUC has entirely failed to meet the statutory standard for retaining state rate regulatory authority.

The CPUC's economic analysis of cellular carriers' market power, cellular rates, cellular carriers' earnings and returns, and the capacity of the cellular networks in California is riddled with fundamental analytical errors and relies primarily on data which is either inaccurate, speculative, or untested by cross examination. Indeed, for the majority of its factual documentation, the CPUC has improperly relied on information which it has withheld from both the cellular carriers and the public.³⁰ Neither the CPUC's analysis nor the "evidence" it offers provide any basis upon which the FCC may conclude that the CPUC has met its burden of proof.

The Carriers Association has enlisted expert economists who are experienced in studying the cellular industry to

³⁰ Motion of the Cellular Carriers Association of California to Reject Petition or, Alternatively, Reject Redacted Information, September 19, 1994, PR File No. 94-SP3

review the CPUC's Petition and the economic arguments it offers. The economic consulting firm of Charles River Associates has prepared a detailed critique of the economic analysis contained in the CPUC Petition. See Appendix A³¹. The Charles River Associates report ("Charles River report") examines the CPUC Petition in depth and concludes that,

[t]he CPUC's analysis in the CPUC's Petition and its related Decision is seriously flawed. Once the flaws are corrected, it is clear that the Commission lacks a sufficient basis for concluding that cellular service in California remains

³¹ The Report is authored by Mr. Stan Besen, Mr. Robert Larner, and Ms. Jane Murdoch, all of whom are qualified economists who have experience in analyzing the cellular industry.

Stanley M. Besen, Ph.D., is a Vice President of Charles River Associates. His professional experience includes 2 years as Co-Director of Network Special Inquiry Staff at the FCC, and 2 years as an Economic Policy Fellow and five years as a consultant in the Office of Telecommunications Policy in the Executive Office of the President. He has held teaching positions at Columbia University, the Georgetown University Law Center, and Rice University. He held the position of Senior Economist at RAND Corporation from 1980 to 1992, and has co-authored several papers on the regulation of the cellular industry.

Robert J. Larner, Ph.D., also a Vice President with Charles River Associates, has held the position of Chief of the Division of Industry Analysis in the Bureau of Economics at the Federal Trade Commission. He has also held teaching positions in Economics at Harvard University, Brandeis University and Boston College. Dr. Larner has also co-authored two papers on the extent of competition in the cellular industry and testified before the CPUC on cellular competition issues.

Jane Murdoch, Ph.D., is a Senior Associate at Charles River Associates, and has taught at UCLA and Pepperdine University. Among her other work at Charles River Associates, she has co-authored a paper on competition in the cellular market and consulted on the structure of cellular carrier/agent business relationships.

uncompetitive and that rates in the state are unreasonably high.

Charles River report at 1. The Carriers Association will contrast the CPUC's contentions in its Petition with the point-by-point analysis contained in the Charles River report.

1. Errors in Economic Analysis in the CPUC Petition: The Findings of the Charles River Report

The CPUC contends that cellular carriers in California exercise market power in order to "price their services at non-competitive levels and to earn returns far above competitive levels...." CPUC Petition at ii. The CPUC in its Petition cites four major indicators of the market power that it attributes to cellular carriers: 1) market share, 2) price levels and changes, 3) earnings, and 4) capacity utilization and expansion.

The report prepared by Charles River Associates concluded that the CPUC had made major errors in its analysis of each of these suspected indicators of cellular carrier market power.

The CPUC's market share analysis was flawed by biased and unwarranted assumptions and relied on current output rather than the more appropriate measure of carrier capacity as the means to measure market concentration. The CPUC compromised its discussion of rates by misconstruing the evidence it used to compare rates and costs. In addition, the CPUC mischaracterized the rate evidence it did present. The CPUC also drew completely improper inferences from facts, such as

the similarity of rates in certain markets, which are, in fact, consistent with a competitive market model.

In addressing the earnings of cellular carriers the CPUC made two fundamental errors. The first such error was to assume that accounting rates of return are valid indications of a carrier's economic return; classic economic theory clearly states that accounting rates of return prove absolutely nothing about real economic returns on investment. Secondly, the CPUC failed to include important items of investment in its calculation of returns, the most critical of which is the value of the radio spectrum license necessary to operate their network. Given these errors, the CPUC's conclusions regarding "excessive returns" are wholly misguided. The returns and rates seen in California are clearly affected by direct result of the scarcity of cellular spectrum.

Finally, the CPUC offered evidence of capacity utilization to prove that excess capacity indicated cellular carriers were maintained "above-market rates". This argument fails because the CPUC has misunderstood the nature of excess capacity in a capital-intensive industry. Excess capacity will naturally result from efficient capital investment strategies, and rational carriers will deal with the excess by offering promotional rate discounts--the very marketing strategies observed by the CPUC. The CPUC's arguments on capacity utilization prove nothing other than that the

California cellular carriers are doing their utmost to meet their obligation to provide quality service for their rapidly growing customer base.

a. Flaws in the CPUC Market Share Analysis

The Charles River report concluded that the CPUC's analysis of market concentration and subsequent conclusions about market power are incorrect, as they are based upon biased and unwarranted assumptions which distort the results of their market concentration calculations. In addition, the CPUC has improperly relied upon CMRS providers' current output rather than their capacity in order to calculate market share. For several reasons, in the CMRS context, the more appropriate measure of market concentration is the capacity of the carrier. When Charles River Associates performed the market concentration analysis with capacity data, the levels of market concentration dropped dramatically, contradicting the CPUC's assertion that carriers will persist in exercising excessive market power even after the introduction of new CMRS competitors. The CPUC also argues that interlocking ownership interests reduce competition in the cellular market, yet the CPUC presents no evidence whatsoever to back up the assertion. The CPUC similarly fails to establish that entry barriers prove a lack of competition, and in any event, CPUC regulation cannot remove the existing entry barriers, only the FCC can allocate additional spectrum, which it is, in fact, poised to do.

Specifically, the Charles River report concludes that the CPUC analysis of current and future levels of market concentration, "does not comport in several important respects with the standard analysis of market shares, described in the Merger Guidelines published jointly by the Department of Justice and Federal Trade Commission." Charles River report ("Report") at 2. The first such error is particularly egregious in that the CPUC has simply assumed that cellular carriers do not compete and built this assumption into its measurement by combining the market shares of the two facilities-based carriers. Petition at 33. Traditional market analysis would commence with a measurement of market concentration before any assumptions are made about anti-competitive conduct, but the CPUC has chosen to treat the two cellular carriers as a single entity for purposes of analysis, even before initial market concentration levels are obtained. The Herfindahl-Hirschman Index (HHI) produced by this bizarre assumption is "almost twice the level that would be obtained if the carriers' shares were separated, which is the standard way of measuring market concentration." Report at 3.

The CPUC next examined the four-year trend in the HHIs for four Metropolitan Statistical Areas (MSAs.)³² "The CPUC's finding that concentration is increasing over time indicates only that resellers are losing market share in several

³² Petition, p. 33.

California markets.³³ It tells nothing about the degree of competition between the facilities-based carriers." Report at 3. Moreover, the resellers' loss of market share is a result which would be entirely consistent with active competition if the facilities-based carriers were more efficient than the resellers in providing services to customers, which is likely.

While the CPUC attempts to analyze the reduction in market concentration which will inevitably accompany the entry of new participants in the California wireless communications market, its analysis results in market share calculations, which "are likely to understate the extent of competition in wireless communications markets." Report at 4. To perform its analysis, the CPUC adopts a 1993 forecast of market penetration for the years 1998 and 2003 from a survey conducted by the Personal Communications Industry Association (PCIA).³⁴ The problem with such forecasts is that they are frequently grossly inaccurate. As the CPUC admits, its own forecasts of cellular market penetration have dramatically underestimated the growth of the cellular industry in California. In 1990 the CPUC estimated that, "it would take approximately five years for cellular service to reach a

³³ Petition, p. 30 and Appendix E.

³⁴ 1994 PCS Market Demand Forecast, Personal Communications Industry Association, January, 1994. PCIA solicited industry experts' five and ten-year forecasts of service penetration.

penetration of 5 percent" when, in fact, penetration rates exceeded 5 percent in less than two years. Petition at 14.

The magnitude of potential errors in forecasts of market share greatly diminishes the value of market concentration calculations based on such forecasts, particularly when there is a superior alternative means of analyzing market share--the capacity of a wireless provider. As explained by the authors of the Charles River report,

capacity, measured by the amount of spectrum licensed for the provision of wireless services,³⁵ is superior to subscriber penetration as an indicator of rivals' ability to respond to a price increase and thereby to curb the exercise of market power. Simply put, if a company has a license to use spectrum to provide wireless service and can readily increase its output, that company's capacity serves as a better gauge of its competitive significance than its output does.

Report at 5.

The Charles River report makes several points in support of the use of capacity to measure market concentration. The Merger Guidelines allow the inclusion of such expansion capacity which new entrants can place in service within less than one year without significant sunk costs if a significant price increase were to occur.³⁶ To allow the inclusion of expansion capacity is entirely reasonable, for it is illogical

³⁵ A carrier's effective capacity is not necessarily measured solely by the amount of bandwidth it is licensed to use. For example, the capacity represented by a given amount of bandwidth is increased substantially if digital rather than analog technology is used to provide cellular service.

³⁶ Merger Guidelines, Section 1.32.

to assume, as the CPUC does by using forecast market penetration rates, that all providers of wireless services will be operating without excess capacity. Report at 6. In the same vein, new entrants in the mobile radio services markets who obtain their licenses by auction or by purchase will have already overcome the principal barrier to entry. "For [these new entrants], the primary cost of increasing output in response to an exercise of market power may be approximated by the incremental cost of expanding their productive facilities. In a market that is experiencing rapid expansion, such as the market for mobile services, this cost may not be significant." Report at 6, see fn. 19.

Additional support for the notion that capacity is a better measure of competitive potential than current or forecasted output comes from the fact that a potential future competitor can affect the market even before it opens its doors for business. Both Nextel and the CPUC itself have criticized the marketing strategies of cellular carriers who are trying to convert customers to "long-term" (1 to 2 year) contracts prior to Nextel's entry into the market, presumably to keep customers from changing to emerging technologies like Nextel.³⁷ The implication of such behavior is explained in the Charles River report:

If the Commission's assessment of the discounts is correct, then the prospect of competition from these providers of wireless

³⁷ Petition, p. 43, 74.

services using emerging technologies is already affecting the pricing behavior of cellular carriers, despite the providers' low or non-existent market shares today....It is clear that potential competition can constrain pricing behavior. Thus, in such a rapidly evolving market as wireless communications, market shares based on providers' current output will overstate market concentration.

...For the reasons given above, effective capacity, as measured by available spectrum adjusted for the mix of digital and analog technologies used to provide wireless services, is a more accurate indicator than market-penetration forecasts of the shares that should be assigned to wireless carriers in measuring market concentration.³⁸

Report at 7.

The Charles River report proceeds to calculate market concentration for four configurations of the market for wireless services using the capacity of both existing and new licensees. The results of these calculations are depicted in Tables 1-4 attached to the Charles River report, Appendix A. In the first two tables, the assumption is that the FCC grants six PCS licenses, three for 30 Mhz and three for 10 Mhz, and that incumbent cellular carriers get no additional spectrum.³⁹ As explained in the Charles River report, "[i]f two cellular carriers compete with six new PCS providers, the resulting HHI

³⁸ The calculation of effective capacity, and the assumptions that underlie it, can be found in An Antitrust Analysis of the Market for Mobile Telecommunications Services, Stanley M. Besen and William B. Burnett, December 8, 1993.

³⁹ The calculations also assume that cellular carriers must reserve 10 megahertz of their capacity to serve customers who use analog equipment, and that digital technology has six times the "throughput" per unit of bandwidth that analog technology does.

is 1,512 (Table 1). If one ESMR provider, such as Nextel, is added, the HHI declines to 1,370 (Table 2)." In both cases, the market is only "moderately concentrated" according to the standards adopted in the DOJ/FTC Merger Guidelines.⁴⁰

In the third case, it was assumed that both cellular carriers acquired the maximum additional 10 MHz of spectrum permitted by FCC rules through the PCS auction. It was also assumed that no ESMR provider was present. This resulted in an HHI of 2,051 (Table 3). When one ESMR is added to this scenario, the HHI drops to 1,845 (Table 4), which lies just within the threshold of a "highly concentrated" market according to the standards of the Merger Guidelines.

As explained by the Charles River report,

These HHI calculations strongly support two conclusions. First, overall industry concentration will decline greatly as the result of the introduction of PCS and ESMR, with the precise extent determined by the identities of the successful bidders in the PCS auctions and by transactions in the aftermarket. Prior to the emergence of providers of these new wireless services, the HHI, calculated for a market of two cellular carriers, is 5,000. In no case does the HHI fall by less than half with the emergence of additional providers, and in two cases it declines by at least two-thirds. Second, the shares of each of the incumbent cellular operators, as measured by their shares of effective capacity, will decline precipitously with the introduction of PCS and the diffusion of ESMR, from 50 percent to the neighborhood of 10 to 20 percent.

Report at 8-9, emphasis added.

⁴⁰ In the Merger Guidelines, HHI levels between 1,000 and 1,800 indicate a moderately concentrated market.

As Nextel's California network is virtually complete and announcements of its initiation of commercial service are being distributed to the press⁴¹, the presence of an ESMR provider is highly likely, and the most persuasive market concentration scenarios developed in the Charles River report are depicted in Tables 2 and 4. These show HHI figures within or just on the border of "moderately concentrated", and, as explained above, they represent a dramatic increase in the level of competition over that found in the current structure of the market.

The CPUC has made three other arguments to support its assertion that cellular carriers exercise undue market power, none of which provide any support for granting the relief sought by the CPUC's Petition.

First, the CPUC asserts that, "Interlocking ownership interests among the duopolists are another indication of the control cellular carriers exercise over the market and why competition cannot flourish at this time in the absence of regulatory oversight."⁴² This is an entirely empty assertion, however, as explained in the Charles River report.

[T]he [CPUC] points to no empirical evidence that California cellular carriers (or cellular carriers elsewhere for that matter) have used cellular partnerships as facilitating devices for anticompetitive behavior. In addition, whatever

⁴¹ "Nextel Announces Commercialization of its All-Digital Integrated Wireless Communications Network in Northern California" Business Wire, July 8, 1994.

⁴² Petition, p. 27.

the significance of interlocking ownership interests among cellular carriers now, they will become less important as suppliers of PCS and other substitutes enter the market and begin offering wireless services in competition with cellular carriers." Report at 9.

Not only has the CPUC failed to provide any empirical evidence, it has provided no evidence whatsoever as to any direct relationship between interlocking ownership and the level of cellular competition. In the face of concrete evidence of competitive trends in cellular rates (see Appendix B), an unsupported assertion that interlocking ownerships interfere with competition should not be given any weight by the Commission.

Second, the CPUC complains of restrictions on entry into the wireless telecommunications market.⁴³ Unquestionably the necessity of obtaining an FCC license in order to use a portion of the radio spectrum is a barrier to entry into the provision of cellular service. Yet, as the Charles River report explains,

"...this barrier is not one of the carriers' making, nor is it one that the CPUC can remedy.

⁴³ Petition at 25-26. It is the very height of irony for the CPUC to suggest that because the federal government controls the allocation of radio spectrum, a state should retain the right to impose uneven regulatory requirements on competing CMSR providers. The central purpose of entrusting the allocation of spectrum to the federal government is to enable the enforcement of uniform standards and regulations where such uniformity is in the national interest. Such is the case in the development of the emerging wireless telecommunications industry, where the creation of national wireless networks can be severely hampered by discriminatory state regulations. See discussion at Section III.B.

Moreover, the FCC is on the verge of overseeing large increases in both the number of providers of wireless services and the amount of spectrum available for supplying both cellular and other mobile services....[T]hese developments will dramatically change the structure of the mobile telecommunications market. By ignoring these changes, or underestimating their importance, the CPUC has fundamentally misperceived the future competitiveness of this market and thus the need for continuing regulation." Report at 9-10.

Third, the CPUC points to the unchanging wholesale market shares of facilities-based cellular carriers and a decline in resellers' retail market shares as evidence of the carriers' market power. The CPUC states that, "the underlying assumption...that there is no significant competition between the duopolists and that they together dominate the market...is supported in part by the comparable market share between the duopolists...."⁴⁴ The CPUC also cites evidence that in the Los Angeles and San Francisco Bay Area MSAs, the resellers' market share declined by half between 1989 and 1993, although the data it references are redacted.⁴⁵ While the CPUC is clearly concerned about these trends, they do not support the ultimate aim of the CPUC Petition because stable market shares are equally consistent with competition. As explained in the Charles River report,

...the data the Commission uses in support of its conclusion that facilities-based carriers have market power are equally consistent with competition in the cellular market. While the Commission does not rely on these data alone in

⁴⁴ Petition, p. 33.

⁴⁵ Petition, p. 30 and Appendix E.

concluding that there is market power, it does not recognize the ambiguity of its evidence.

Stable market shares do not necessarily imply that firms are dividing the market between themselves through coordinated behavior.⁴⁶ This is particularly true in markets for cellular service, where the two facilities-based carriers have licenses to use the same amount of spectrum, and therefore possess the same amount of capacity. Moreover, if cellular carriers are competing vigorously to offer customers special features or services, these enhancements may well be introduced at about the same time. A cellular carrier may be quick to match a competitor's new price and service offering with a new service package of its own. These quick reactions in matching a competitor's offerings will contribute to growth of the market, but shares can be quite stable. Rapid growth and relatively stable shares are precisely the pattern that is observed in cellular service in California markets.

Report at 10-11.

Finally, the CPUC's complaint that resellers' market share is declining relative to those of the facilities-based carriers does not begin to prove that there is collusion between carriers or the exercise of undue market power. "The two facilities-based carriers may be able to provide ancillary services to subscribers at lower cost, whether due to economies of scale or other factors." Report at 13. There is no evidence whatsoever that the CPUC even considered the possibility that the declining market shares of resellers were due to effective competition rather than some form of anti-

⁴⁶ Neither does coordinated behavior necessarily imply stable shares. Cooperating companies may reach market-sharing arrangements, establishing predictable share behavior over time, but those shares may vary from one period to the next. Thus, unstable market shares do not necessarily imply that firms are behaving competitively.

competitive behavior. The Charles River report summarized the CPUC's position on market share in this manner,

This example is yet another illustration of the CPUC's propensity to interpret every piece of ambiguous evidence unfavorably to the carriers. Its analysis of carrier market shares and their stability is not an adequate basis for the strong conclusions the Commission has drawn about the cellular carriers' market power.

Report at 11, emphasis added.

b. The CPUC Has Misinterpreted The Available Data On Cellular Rates And Its Conclusions Are Not Supported By The Evidence

In discussing cellular rates, the CPUC has ignored clear evidence of substantial rate reductions in the California market. In addition, the CPUC's analysis of cellular rates is entirely undone by its analytical errors. The CPUC concentrates on wholesale rates when it is clearly retail rates that customers care most about. In addition, the CPUC has misunderstood the relationship between rates and various indicators of cost in the cellular industry, and as a result, it cannot sustain its arguments that rates are well in excess of costs. The CPUC has also mischaracterized the rate evidence it did present, particularly in claiming that a nationwide rate survey which purported to show increasing rates proved a similar trend in California. The actual rates used in the study proved otherwise. The CPUC also drew completely improper inferences from certain facts, such as the similarity of rates in certain markets, which are, in fact, consistent with a competitive market model.

After reviewing the available data on rates offered by carriers in the five largest MSAs and 2 small RSAs for both basic plans and discount plans, the CPUC concluded that cellular prices in California are high, have not declined commensurately with costs, and are nearly identical between competing facilities-based carriers.⁴⁷ The Charles River report concluded that none of these conclusions is supported by the available evidence. Report at 12.

The CPUC argues that nominal rates for carriers' basic rate plans have not changed in three of the five markets studied during the five years 1989 to 1993.⁴⁸ "However, stable nominal prices imply that real prices have fallen if the general price level has increased. In real terms (that is, adjusted for inflation), however, rates for basic service have fallen by at least 17 percent, a fact that the CPUC ignores."⁴⁹ Report at 12. It is also true that carriers made substantial enhancements in the service quality during this time period, including upgrading the quality of call transmission and expanding the area in which cellular subscribers could make calls without incurring additional toll charges.⁵⁰ "When these

⁴⁷ Petition, pp. 34-35 and 45-46.

⁴⁸ Petition, p. 38.

⁴⁹ The Consumer Price Index increased by 20 percent during this period, and the implicit price deflator for Gross Domestic Product increased by 17 percent.

⁵⁰ See, for example, the Comments of the Cellular Carriers Association of California in I.93-12-007, Investigation on the Commission's Own Motion into Mobile Telephone

quality improvements are taken into account, the price declines are even larger. Subscribers who remained on basic-service plans over the entire period were clearly better off in 1993 than in 1989." Report at 12-13.

The CPUC has made a fundamental analytical error by trying to concentrate on wholesale rates when retail rates are what cellular customers actually pay. Moreover, retail subscribers have not been limited to staying with basic-service plans. The single most important trend in cellular rates from 1990 to 1994 has been a massive movement by cellular subscribers from basic rate plans to the many new discount plans offered by carriers. As depicted in Charts G, H, and I in Appendix B, the retail rate study conducted by the Carriers Association in conjunction with Ernst & Young reveals that the number of subscribers on discounted rate plans has climbed to 68.9% in large markets and over 77% in medium sized markets, compared to only 17% and 28%, respectively, in 1990. One would expect this migration to discount rates to be reflected in savings for cellular customers--and despite the CPUC's attempts to obfuscate the data on rates--that is exactly what the data shows.

The Carriers Association study of retail rates, reflected in Charts D, E, and F in Appendix B, shows that real cellular rates, adjusted for inflation, have substantially declined for

Service and Wireless Communications, February 25, 1994, p. 22 (hereafter, "Carriers Association Comments").

all levels of cellular usage in all types of markets.⁵¹ Depending upon the monthly volume of calls a customer makes, the lowest or "optimal" rate available has declined since 1990 from 15.6% to 24% in large markets (over 500,000 customers), declined from 12.5% to 24.5% in medium markets (between 200,000 and 500,000 customers), and fallen 20.7% to 23% in small markets (under 200,000 customers).⁵² These are truly significant rate reductions, and more importantly, these reductions are reflected in the rates which the majority of California cellular customers actually pay.

The CPUC has attempted to avoid a straightforward explanation for these significant retail rate decreases by focusing on basic rates. "The CPUC's narrow focus on basic rates is comparable to evaluating airline prices by looking only at prices paid by customers who are paying full fares

⁵¹ See the detailed explanation of the Carriers Association rate study at Section II.B.5.

⁵² Charts D, E, F in Appendix B.

when, in fact, most customers obtain discounts.⁵³" Report at 14.

The CPUC rejected a direct comparison of rates for discount plans and basic plans because discount plans have restrictions and conditions not found in basic plans. The Charles River report criticized the CPUC's reasoning as, in effect, second guessing customers' own choices of service.

It is true that the costs of conditions such as termination charges are difficult to quantify, and that a comparison that is limited to rates of discount and basic plans without taking these costs into account may overstate the magnitude of the savings that subscribers realize in switching to a discount plan. Nonetheless, by migrating to discount plans, a substantial number of California cellular subscribers have revealed their preference for the discount plans despite the loss of some flexibility and the risk of termination penalties associated with these plans. The fact that the subscribers gains cannot be readily quantified should not lead the CPUC to overlook the point that, by their behavior, these subscribers are demonstrating that they think they are better off with discount plans, regardless of what the Commission may believe.

Report at 13-14, emphasis in original.

⁵³ In 1993, there was no decline in the average revenue per enplanement for passengers paying full fares. However, passengers buying discounted tickets experienced a 3 percent decrease in the average price per enplanement. Furthermore, the proportion of discount-fare enplanements increased over the course of 1993 from 84 to 89 percent. Together, the reduction in discount fares and the passenger migration toward discount fares resulted in a decline of 8 percent in the average fare per enplanement for all types of passengers in 1993. Thus, the vast majority of passengers paid lower fares by the end of 1993, even though the average full fare was unchanged. See Air Transport Association of America, Monthly Discount and Yield Report, December 1993.

In fact, the CPUC did admit that, "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."⁵⁴ Yet the CPUC concluded that it was, "unable to determine whether cellular rates statewide went down as a result of the increased use of discount plans"⁵⁵ because of the difficulties of quantifying the impacts of the restrictions and conditions on consumers. The actual effect of these discounts on consumers is not so difficult to determine. As explained in the Charles River report,

...subscribers who stayed on basic plans are...better off than they were in 1990, and those subscribers who switched to discount plans must be better off since they chose to switch. If both groups of subscribers are paying lower rates than they paid in 1990, the conclusion that rates overall went down is inescapable.

Report at 15.

The CPUC also attempted a comparison of changes in cellular rates compared to changes in the cost of providing cellular service. This analysis contained several errors which deprive it of any persuasive weight. The Charles River report explained,

First, the Commission compares percentage changes in nominal basic rates with percentage changes in real operating expenses per subscriber, a totally inappropriate comparison.⁵⁶ In addition, since most

⁵⁴ Petition, p. 43.

⁵⁵ Petition, p. 43.

⁵⁶ Petition, pp. 34-35. Both percentage changes are redacted, marking further evaluation impossible.

subscribers in California are purchasing cellular service under discount plans, even a comparison of changes in inflation-adjusted basic rates to changes in real operating expenses per subscriber makes little, if any, sense.

Second, a comparison of changes in basic rates to changes in capital investment per subscriber, is also inappropriate.⁵⁷ Capital investment is related to the expected increase in the number of subscribers, and to the stock of capital equipment in place today, not the number of current subscribers, for whom past investments were made. The Commission's comparison ignores the fact that the costs of serving existing subscribers would not necessarily change even if no new subscribers were being added and the only need for investment were to replace capital.⁵⁸

Report at 16.

The Commission attempts to compare California cellular rates with rates in other states, concluding that cellular rates in California are among the highest in the nation.⁵⁹ However, this comparison is limited to a study of rates for cellular service for "personal safety and convenience use" made by the National Cellular Resellers Association (NCRA). Such usage represents only a small percentage of cellular subscribers overall, and the CPUC makes no effort to

⁵⁷ Petition, pp. 34-35. Again, the percentage changes are redacted.

⁵⁸ What the Commission has done is to confuse stocks and flows. Investment is a flow variable, measured by the rate of capital expenditure per period of time, while the number of subscribers measured at some moment in time is a stock variable. Comparing changes in these two variables only obfuscates the issues of whether prices should have fallen and whether prices are competitively determined.

⁵⁹ Petition, p. 46.

demonstrate whether the trends in such rates are representative of movements in cellular rates generally.

Grossly misleading, moreover, is the CPUC's inference that the overall results of the NCRA study apply to California cellular rates. As explained in the Charles River report,

[In the NCRA study] rates for personal safety and convenience use of cellular services increased by an average of 32 percent for carriers in the 30 largest cellular markets between January 1988 and January 1994.⁶⁰ What the CPUC failed to note, however, is that rates in all three California cities included in the survey moved contrary to the national trend. According to the NCRA data, rates for both cellular carriers in San Francisco declined by 20 percent over the period....In San Diego, one of only four cities where one carrier reduced its rate, the A-block carrier's rate fell by 19 percent, while the rate for the B-block carrier increased by only four percent. In the third city, Los Angeles, rates remained unchanged over the period.⁶¹ Thus, all three California cities in the NCRA study were included in the handful of major markets where carriers reduced rates for cellular service for personal safety and convenience, or did not raise them, during the period from 1988 to January 1994. Furthermore, adjusted for inflation, rates paid by subscribers for this service fell substantially in all three cities during this period.

Report at 17.

The CPUC asserts that due to the lack of competitive "substitutes" and barriers to entry into the market, "incumbent duopolists should not be expected to reduce price down to the level of unit cost."⁶² However, one of the

⁶⁰ Petition, p. 46.

⁶¹ Decision, Appendix 1.

⁶² Petition at 50.