Appendix M

Capacity Utilization
Los Angeles MSA

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Decision 94-08-022

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Investigation on the Commission's Own Motion into Mobile Telephone Service and Wireless Communications.	I.93-12-007 (Filed December 17, 1993)

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INTERIM OPINION

I. Background

On December 17, 1993, we opened an investigation of the mobile telephone service industry to develop a comprehensive regulatory framework designed to promote an orderly transition into a fully competitive marketplace while assuring that consumers are protected against unjust or unreasonable rates. In this interim opinion, we consider the threshold question of whether current market conditions for mobile telephone services protect subscribers adequately from unjust, unreasonable, or discriminatory rates, and consequently, whether continued state regulation of carriers is necessary to protect consumers.

As a result of our investigation in this proceeding, we conclude that the wholesale cellular telephone market currently remains uncompetitive. Accordingly, state regulation of cellular carriers should continue at least for the near term to protect consumers against unreasonable rates while fostering the development of a competitive mobile telecommunications market. For purposes of this interim decision, we defer full consideration and implementation of a new regulatory framework for the mobile telecommunications service market to a later decision in this proceeding. Except for limited interim measures as adopted herein, existing rules shall continue in effect pending completion of our investigation in the second phase of this Order Instituting Investigation (OII or I.) as to the appropriate regulatory framework to govern mobile telephone services. In formulating a new regulatory framework, we shall adopt provisions to gradually reduce and eventually eliminate regulation of facilities-based cellular carriers as effective competition materializes in the wholesale mobile service market.

This investigation encompasses all forms of commercial mobile telephone service provided to the public within California. In addition to cellular telephone service, our investigation includes any form of mobile communications technology that permits a user to initiate or receive calls in the form of voice or data while moving freely within a broad service area.

In this OII, we have proposed to replace the current wholesale/retail cellular regulatory structure with a regulatory framework for all mobile telephone service providers which distinguishes treatment solely based on whether a provider is classified as "dominant" or "nondominant." Firms would be considered "dominant" if they control important bottlenecks which are essential to providing mobile service to some or all of the public. All other firms which are not affiliated with dominant providers would be classified as nondominant.

Our stated objective in the OII is that regulation promote an environment in which Californians receive high quality and reasonably-priced mobile telephone services. To this end, we seek to encourage innovation which improves the quality and efficiency of service, and increases the range of choices available to satisfy the diverse needs of California consumers. Thus, a balanced regulatory approach is required which encourages competitive entry into the mobile service market while assuring effective oversight of facilities-based carriers until such competition develops. We are firmly committed to maintaining the requisite oversight to discourage firms from exercising excessive market power or attempting to defraud the public.

This investigation builds upon the industry analyses we have done previously in I.88-11-040. As stated in this OII, a number of recent developments prompt our investigation to develop a comprehensive strategy for the mobile telephone market. These developments include the impending entry of alternative service providers, the growing dependence on mobile communications by

California consumers, experience with trying to implement a monitoring of market competitiveness, and recent changes in federal law which have significantly altered federal authority over mobile services.

Significant change in federal regulation of mobile service providers was initiated with the passage of the federal Omnibus Budget Reconciliation Act of 1993 (Budget Act) on August 10, 1993. The Budget Act amends Section 332 of the Federal Communications Act of 1934 in order to create a new regulatory framework governing "commercial mobile radio service (CMRS)." On March 7, 1994, the Federal Communications Commission (FCC) issued its "Second Report and Order" (FCC Order) addressing the implementation of the 1993 Budget Act. As stated in the FCC Order, the intent of the Budget Act was to replace traditional regulation of mobile services with a comprehensive, consistent framework.

The Budget Act also grants the FCC the authority to forebear from regulation of CMRS providers, including cellular carriers. The FCC concluded in the Second Order that "the current state of competition regarding cellular services does not preclude our exercise of forbearance authority." Yet, the FCC stressed that "an important aspect of this conclusion is that we have decided to initiate a further proceeding in which we will propose to establish extensive and ongoing monitoring of the cellular marketplace as a means of ensuring the forbearance action we take in this Order does not adversely affect the public interest." (Pp. 57-58.) The Budget Act also preempts state and local rate and entry regulation of all commercial mobile radio services effective August 10, 1994, subject to the filing of a petition to retain state regulatory jurisdiction. Under Section 332 (c)(3)(B), any state with rate regulation in effect on June 1, 1993 may petition the FCC by August 10, 1994 to extend that authority based on a showing that industry market conditions fail to protect subscribers from unjust

rates, or that such service is substantially a replacement for landline exchange service.

Accordingly, we solicited evidence in this Investigation on (1) the degree of competition currently existing in urban, suburban and rural California markets for commercial mobile services; (2) whether, in each market, competitive conditions protect subscribers adequately from unjust and unreasonable rates, or rates that are unjustly discriminatory for commercial mobile services; and (3) where such market conditions exist, whether commercial mobile service is a replacement for landline telephone exchange service for a substantial portion of the telephone landline exchange service within California markets.

Based upon the results of our investigation in this OII as presented in this Interim Order, we conclude that the cellular sector of the mobile services market continues to be uncompetitive which has perpetuated unreasonably high rates. Accordingly, we shall exercise our option under federal law to file a petition to retain regulatory authority over cellular carriers for an interim period of 18 months after September 1, 1994. It is our expectation that the industry would have come under effective competitive discipline by the end of this period. Pending a final ruling on that petition, our regulatory authority over cellular carriers shall continue. Our findings and conclusions concerning the state of competition within the industry and the need for continuing regulatory oversight are set forth in Section IV. Adopted measures to implement our new regulatory framework are discussed in Section V.

II. Procedural Matters

We issued our Order Instituting Investigation into Mobile Telephone Service and Wireless Communications on December 17, 1993. All regulated firms providing any form of mobile telephone service, as defined in the OII, were made respondents. An initial service list was created by incorporating the service lists from prior mobile telephone investigations/rulemakings (I.88-11-040/

R.88-02-015/I.87-11-033). The OII set forth our proposal to replace our present regulatory structure with a more comprehensive framework encompassing the mobile communications market as a whole. We summarized the relevant issues in the form of questions (OII Appendix A) and proposed policies (OII Appendix B) as a basis for further evaluation of our proposed direction. We solicited respondents to file initial and reply comments on the issues raised in the OII. Approximately 30 parties filed initial comments on February 25, 1994. Reply comments were filed on March 18. Following receipt of the comments, the assigned Administrative Law Judge (ALJ) conducted a review as prescribed in the OII:

> "[T]he assigned Commissioner may work with the assigned administrative law judge to identify issues in this OII which should be dealt with on a separate and expedited track for the purpose of meeting [Federal Communications Commission] FCC filing requirements ...for the purpose of retaining [CPUC] authority over the regulation of the cellular industry." (P. 35.)

Following initial review of the filed comments, the assigned ALJ issued rulings directing cellular carriers to provide supplemental information on billing data and capacity utilization. The carriers provided the data under General Order 66-C. We have incorporated the responses of the carriers in our analysis of industry competition.

In accordance with the OII, we have identified matters which are ready for early resolution and decide those matters in this interim order. For resolution of these interim matters, no evidentiary hearings are required. The most significant matter resolved in this interim order is whether current market conditions in the mobile service industry protect subscribers from unjust, unreasonable, or discriminatory rates, and whether continued regulatory oversight is needed. Notwithstanding the claims of the cellular carriers that the disputed issues concerning industry

competitiveness in the OII require hearings before issuance of a Commission decision, we disagree. The information supplied in the filed comments together with the record already developed in our previous I.88-11-040 provide a sufficient basis to resolve the interim issues addressed herein. With respect to the remaining issues in the OII not resolved in this interim order, we will consider the need for evidentiary hearings at a later date concerning further implementation of the our mobile telephone service regulatory framework.

III. Positions of Parties - Overview

The approximately 30 parties filing comments represented four general interest groups: (1) facilities-based cellular telephone carriers; (2) cellular resellers; (3) new and potential mobile telephone service market entrants; and (4) consumer and public interest groups. Because of the large number of parties filing comments in response to the OII, we shall not discuss the position of each individual party. Rather, we will summarize parties' positions in terms of their major interest group categories. Nonetheless, we have reviewed each party's comments and taken them all into account in formulating our findings and conclusions in this interim decision, as appropriate. Likewise, to the extent we are deferring consideration and implementation of revisions in our existing regulatory rules regarding cellular carriers until a later decision, we will focus our description of parties' positions on the issues dealt with in this interim decision.

A. Cellular Carriers' Position

The cellular carriers[1] disagree with the premise that the cellular industry is uncompetitive, but rather contend that significant evidence exists of cellular competition, including falling prices, advancing technology, and rapid system growth. They also assert that the impending entry of alternative mobile telecommunications providers will enhance existing competition even more. The carriers oppose any CPUC actions to impose cost-based price caps or unbundling as proposed in Appendix B of the OII. The carriers contend that such cost-based regulation would entail substantial evidentiary hearings and would ultimately be counterproductive by constraining free market competition. Given the rapid pace of technological development and change in the telecommunications industry, the carriers claim that anything the CPUC might decide on the record developed in this Investigation would quickly become outdated and rendered moot. (Fresno/Contel Comments). The carriers generally argue that the CPUC should adopt the FCC's policy of forbearance from regulation of all wireless carriers and simply allow federal preemption to occur. They also believe the OII proposals are contrary to the CPUC's own Telecommunications Infrastructure Report to the Governor which acknowleged the shortcomings of a "command-and-control" approach to telecommunications policymaking.

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1 Cellular Carriers filing comments included: Los Angeles Cellular Telephone Company (LACTC); Bay Area Cellular Telephone Company (BACTC); Fresno MSA Limited Partnership, et al. (Fresno MSA); RSA No. 3 Limited Partnership; Cal-One Cellular L.P. (Cal-One); U.S. West Cellular of California (U.S. West); McCaw Cellular Communications, Inc. (McCaw); Sacramento-Valley, L.P.; and GTE Mobilenet of California, L.P. and GTE Mobilenet of Santa Barbara, L.P.; and the trade group, Cellular Carriers Association of California (CCAC).

The carriers further contend that there are a number of factual disputes among the parties as to the competitiveness of the wireless industry. They contend that the page restriction on comments as ordered in the OII prevented parties from addressing fully the various issues raised therein. They do not believe the CPUC can issue an order resolving these disputed issues until it has held evidentiary hearings.

B. **Alternative Providers' Position**

Alternative service providers include those firms seeking to offer mobile telecommunications services through alternative technologies without reliance on facilities-based cellular carriers. This group of respondents included Nextel Communications, Inc. (Nextel), Pacific Bell (PacBell), MCI Communications (MCI), and others. This group generally believes that cellular carriers continue to exert significant market dominance such that continued regulation of cellular services is appropriate. Under federal law, alternative carriers such as Nextel, will not be subject to state regulation until August 10, 1996. After that time, Nextel may become subject to regulation as a nondominant carrier as defined under our proposed regulatory framework. These respondents argue that alternative providers will not become dominant in the California wireless market in the near term. Nextel opposes the Commission's proposals for "unbundling of radio links" and imposition of price caps on unbundled rate elements billed by dominant wireless providers.

Nextel believes that the OII's unbundling proposal, while well intentioned as a procompetitive step, is misconceived. Nextel does not believe any efficiencies would be gained through unbundling, and proposes that hearings be held to consider the feasibility of unbundling before adoption of such a proposal.

C. **Cellular Resellers' Position**

Cellular resellers[2] offer retail cellular service to the public by reselling wholesale blocks of service acquired from facilities-based cellular carriers. As such, resellers must rely on access to facilities-based carriers' facilities in order to offer their service. The cellular resellers share the alternative service providers' view that cellular carriers hold market dominance and should be subject to state regulation. Unlike the alternative service providers such as Nextel, the resellers believe that the cellular-related network functions should be "unbundled" such that resellers can perform their own switching functions independent of the cellular duopolists. Resellers believe such "unbundling" is essential for a competitive market to develop. The resellers support the adoption of a cost-based price cap for dominant carriers.

D. **Consumer Group's Position**

This group is represented principally by the Commission's Division of Ratepayer Advocates (DRA), the County of Los Angeles (County), Public Advocates, Inc., and Silicon Valley Council of the Blind. This group is primarily interested in assuring that any adopted regulatory framework protect consumer interests. The consumer groups agree that cellular carriers hold market dominance and should be subject to state regulation, but differ among themselves on the proper ratemaking approach to implement price caps and unbundling of dominant carriers.

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2 Cellular Resellers filing comments included: Personal Cellular Services, Inc.; Nationwide Cellular Service, Inc.; Dorsa Communications, Inc. et al.; Cellular Service, Inc. and Comtech Mobile Telephone Company; and the trade group, Cellular Resellers Association (CRA).

IV. Is Continued Regulatory Oversight of the Cellular Industry Necessary?

A. Rationale for Regulation of Cellular Carriers Over the Past Decade

As a beginning point for evaluating the need for continued oversight of cellular carriers, we consider the historical context in which regulation of mobile service communication has evolved.

Cellular telephone technology has become the most widespread form of wireless telecommunication since the first commercial cellular telephone systems began operating in the early 1980s. The FCC exercises federal jurisdiction over interstate and international communications by licensing access to radio wave spectrum. The FCC has set aside segments of the radio spectrum for various communications technologies such as broadcast communications (e.g., television and radio) as well as private two-way communications (e.g., cellular). Within each designated radio frequency band, the FCC issues a limited number of licenses for use of the spectrum within a given geographical territory.

Cellular service provides two-way voice or data communication through the medium of radio frequency transmission. Access to the radio wave spectrum is an essential requirement for operation as a cellular carrier. Each licensed cellular carrier utilizes a network of cell sites to transmit and receive signals over its licensed spectrum frequencies. Once a call is detected by a cell transmitter, the call signal is relayed to a mobile telephone switching office (MTSO). The call is then routed through the local wireline network to complete the call or to transmit to another cell.

In its original industry structure plan for commercial cellular communications, the FCC believed that "since a cellular system is technically complex, expensive, and requires a large

amount of spectrum to make it economically viable, competing cellular systems would not be feasible in the same area." (Land Mobile Radio Service Notice of Inquiry Docket 18262 14 FCC 2d 320 (1968). By the early 1980s as cellular industry was becoming commercially feasible, the FCC concluded that the regulatory and technical environment had evolved sufficiently that two carriers could be economically viable within a designated market territory.

In 1981, the FCC established designated market areas for provision of cellular service and granted two licenses in each market to build facilities and offer cellular telephone service. The FCC thus limited access to the airwave spectrum for cellular communications by licensing only two carriers per service area whereby 50 megahertz (MHz) of spectrum are equally divided between the two carriers and dedicated exclusively for cellular transmission. The FCC established 306 Metropolitan Statistical Areas (MSAs) and more than 400 Rural Statistical Areas (RSAs) for licensing purposes. One of the two licenses in each area was reserved for applicants not affiliated with any landline telephone carrier. This license was to be assigned by hearings, negotiated settlements, or lottery. The second license was reserved for the local telephone company. The two facilities-based carriers licensed in each market were permitted to build cellular systems and provide service therein.

Marketing channels were established in the form of the licensed carriers' own sales forces, independent agents, and cellular resellers. Agents' roles were limited merely to securing new customers for cellular carriers. Once the agreement to provide service was made, the subscriber would deal directly with the cellular carrier for subsequent servicing. By contrast, cellular resellers buy blocks of cellular telephone numbers at wholesale rates from the licensed cellular carriers and resell the carriers' services to their own customers at retail rates. The reseller

becomes the subscriber's cellular telephone company, providing a single source for billing, services, and customer support.

Although the FCC required cellular wholesalers to sell to resellers on a nondiscriminatory basis as a means of enhancing competition in the cellular industry, the resellers' presence does not alter the duopoly market structure at the wholesale level. The resellers' costs are largely controlled by the wholesale carrier from whom service is purchased. Resellers cannot compete directly with either of the two facilities-based wholesale carriers.

The duopoly market structure created by FCC licensing practices limited the options available within California for promoting a competitive mobile services industry and assuring reasonable consumer prices.

Within California, our initial approach to regulation of cellular carriers' prices in the early 1980s was summarized in D.90-06-025:

> "When the FCC licensed the original cellular carriers in California, we faced a broad strategic choice. On the one hand, we could have treated cellular carriers as monopolists and set and enforced strict cost of service rates. However, we were uncertain as to the actual competitiveness of the duopoly, the likely progression of technology and our potential impact upon it, and whether or not cellular would be more than an expensive adjunct to other services. On the other hand, we could have offered carriers the maximum pricing flexibility allowed by law. However, the possibility of monopoly-like profits and the prospect that cellular would become an important service deterred us from that course. Our resulting pattern of regulation, initial rates based on cost projections but left largely unexamined since, was reflective of this uncertainty regarding cellular's role as a service and our role in overseeing it."

As we recognized the lack of information as to the competitiveness of the emerging cellular market, we relied upon a two-tiered

"wholesale/retail" cellular market structure to bring at least some indirect competitive pressure on the cellular wholesale market. In D.84-04-014, we created a resale plan to provide a viable business opportunity for resellers. Resellers were permitted market entry through expedited ex parte issuance of certificates of public convenience and necessity (CPC&N). Retail rates were based on market-determined prices. Our aim was to develop and maintain a separate resale market with mechanisms for separate "wholesale" and "retail" tariffs for duopoly carriers, and setting of wholesale/retail margins.

After several years of experience of cellular service, we opened Investigation (I.) 88-11-040 to assess whether the regulatory structure we established in 1984 was meeting Commission objectives and if changes in the structure were warranted. Following Phases I and II of that investigation, we issued D.90-06-025 (36 CPUC 2d 464). Our intent in D.90-06-025 was to promote competition for cellular service. Yet, we expressed concerns that competition within the cellular market was still constrained by the limitations on market entry imposed by the FCC duopoly licensing rules. As we noted therein: "Were it our choice, we would license additional carriers to assure the public the full benefits of a well-working competitive industry without a need for substantial regulatory intervention." (D.90-06-025, p. 5). Absent authority to license additional carriers, however, we maintained a degree of regulatory oversight of cellular carriers while seeking alternative ways to enhance competition within the cellular market.

In D.90-06-025, we elected to "monitor pricing and investment behavior of duopolists for the purpose of detecting any "failure to compete" at the wholesale level. We elected this approach on the grounds that cellular service was "discretionary" and that rapid techological change made industry oversight difficult and traditional cost of service regulation problematic.

Nonetheless, we did not relieve cellular carriers seeking to increase rates from providing some measure of cost support justifying higher rates as outlined in Ordering Paragraph 9 of D.90-06-025.

Subsequently, in D.92-04-081 (Re Fresno Cellular), we noted that the Commission and its staff were having difficulties in evaluating compliance with Ordering Paragraph (OP) 9, stating that the requirement for supporting documentation "is ambiguous and appears to be inconsistent with the overall regulatory framework which was established for cellular entities." We accordingly reopened our cellular investigation to reexamine our basis for adoption of OP 9 of D.90-06-025. Resolution has been deferred to this proceeding.

We also expressed concern in D.90-06-025 about whether the wholesale/retail market structure was promoting competition. We noted the potential for anticompetitive cross subsidy of affiliated retail operations by duopoly wholesale operations in D.90-06-025. As noted by Cellular Resellers Association (CRA) in that proceeding, between 74%-79% of the retailer's cost to furnish retail service represented costs a retailer must pay to a facilities-based wholesale carrier. Thus, resellers argued that the effects of wholesale carriers' unfair cross subsidization of their retail operations would result in a loss of competitive resellers and would ultimately harm consumers by limiting choice. To address this concern, we developed a Uniform System of Accounts (USOA) cost allocation methodology in Phase III of I.88-11-040 intended to detect any such cross subsidization and adopted it in D.92-10-026.

Subsequently, however, we issued D.93-05-069 which rescinded our adoption of the USOA cost allocation methodology in D.92-10-026 pending further consideration in this proceeding. Before expending further resources to adopt such measures, we considered it appropriate first to determine whether our underlying

premises about the state of competition within the cellular market remained realistic, given the anticipated entry of alternative wireless technologies. Accordingly, at the present time, no adopted tracking mechanism is in place to assure that cross subsidization is not occurring or that the wholesale/retail structure adequately promotes a competitive market. Accordingly, the issues of USOA modification, the reseller switch, unbundling of the wholesale tariff, and the capacity monitoring program were deferred from I.88-11-040 to this Investigation.

B. Framework for Evaluating the Continued Need for State Regulation: Market Power Analysis

Our proposed regulatory framework set forth in the OII would involve continued jurisdiction over facilities-based cellular firms as dominant carriers until a more competitive market emerges. We solicited parties' responses as to the current state of market competitiveness among cellular carriers and likely timing of new entrants into the mobile telecommunications market. We also solicited comments on whether mobile telephone service is affected with a public interest in a manner requiring regulatory oversight.

As a starting point for evaluating whether facilities-based cellular carriers have market dominance, we must formulate an approach to determine the competitiveness of the market. Based upon our assessment, we shall determine whether the mobile services market is sufficiently competitive so as to prevent any single entity from charging unreasonable, discriminatory, or unjust prices.

In their comments in the OII, various parties noted the complexities of undertaking a study of market competitiveness. The cellular carriers argue that additional time, data, and evidentiary hearings would be required to determine market power. We agree that if we were to determine precise measures of market power for each firm, additional study would be needed. For purposes of this interim order, however, we do not require such precise measures.

Rather, we are interested in broad patterns which indicate whether the mobile telecommunications marketplace has been unable to produce reasonable rates through competitive forces over time. As we stated in the OII:

> "Cellular service should be subject to continuing oversight until the Commission is absolutely convinced that market forces are in place to ensure just and reasonable rates and service to consumers." (OII, p. 18.)

As a basis for our findings on market competitiveness, we have reviewed the information submitted by parties in comments filed pursuant to the OII and the supplemental information submitted by parties in response to ALJ rulings in this OII. Accordingly, based upon this information, we can effectively assess whether market forces are competitive enough to ensure just and reasonable rates without regulatory oversight.

Consistent with respondents' general comments, the proper starting point for an analysis of the competitiveness within the mobile telecommunications industry is to define the market. This approach conforms with the US Department of Justice Merger Guidelines (DOJ Guidelines) commonly used for testing market power in federal antitrust analysis. As prescribed by the DOJ Guidelines, the market definition must distinguish the relevant product or service and any close substitutes. The definition must also consider the changes in the geographic extent of the market over time.

A geographic market is typically defined as the smallest area in which an attempt by a firm to raise price would be profitable. If customers responded to a price increase by purchasing the good or service in another location, then the new location is included in the geographic market. The analysis is repeated until it is unlikely that price changes will further change the market size.

Once a definition of the market and its geographic extent is determined, the DOJ Guidelines consider what would happen if a profit-maximizing firm tried to raise its price by a "small but significant and nontransitory" amount. We must determine whether any firm(s) within the mobile services market possess sufficient market power to charge prices above competitive levels.

As to measures of market power, there are a variety of relevant criteria. In the restructuring of the regulatory framework for the interLATA telephone industry, we solicited information as to how to assess the market power held by AT&T Communications of California (AT&T). The indicators we considered in that proceeding included: (1) market share; (2) earnings; (3) ease of market entry and exit; (4) facilities ownership; and (5) price changes, service options and customer satisfaction. Those same considerations are relevant in our present inquiry of the mobile services market. In addition, technological advancement is another important criterion.

1. **Definition of the Relevant Market**

While parties agree that market definition is an appropriate starting point in assessing market power, they disagree over how to define the market. The primary dispute concerns whether to define the cellular sector as a separate market or whether to include other mobile telecommunications technologies as part of the same market.

Resellers, consumer groups, and alternative technology providers believe that emerging noncellular alternatives such as Personal Communications Services (PCS) and Enhanced Specialized Mobile Service (ESMR) still face various constraints limiting market penetration in the near term. As a result, they argue that these technologies cannot be relied upon to provide a competitive wireless market at least for the next few years.

Cellular carriers contend that the cellular market is already part of a larger market defined to include alternative

forms of wireless telecommunications such as PCS and ESMR. However, cellular carriers believe that the cellular market is presently competitive, even if the market definition is limited to exclude PCS and ESMR providers as substitutes for cellular service. Even to the extent the Commission has concerns over the competitiveness of the cellular market, itself, the carriers believe that the imminent entry of PCS and ESMR providers should effectively disspell any lingering concerns over market competitiveness.

They contend that DRA and resellers are overly pessimistic in their assessment of the market obstacles facing alternative wireless service providers. Cellular Carriers Assocation of California (CCAC) believes that the new technologies already constitute close substitutes for cellular. Cellular carriers such as General Telephone and Electronics Corporation (GTE) also take issue with the OII in its emphasis on the cellular market to the exclusion of other substituable technologies. GTE finds this inconsistent with the OII's stated intention to treat the entire mobile services industry as a whole.

2. **Discussion**

The potential for close substitutes for cellular service must be considered in determining how broadly to define the market. This approach is consistent with the DOJ Guidelines and parties' comments, generally. While differing on the precise criteria for definition of the market, parties' essential dispute is over whether the emerging technologies such as PCS and ESMR technologies constitute close substitutes for cellular service. The DOJ Guidelines describe substitutability as: (1) reasonable interchangeably of use to which the services can be put; and (2) the extent to which consumer preference shifts freely between the services, known as cross-elasticity of demand.

Depending on the user's needs and preferences, potential substitutes for cellular service may exist for certain limited