been issued in Connecticut. According to the Resellers, there has been no impact on the availability of substitute services for state consumers and those with the experimental PCS licenses will not receive priority in the auctioning of new allocated spectrum except for Cox Communications, American Personal Communications and Omnipoint, which were awarded "pioneer preferences by the FCC. Id.

The AG argues that the Connecticut wholesale cellular market is highly concentrated and there are no substitutes for cellular service. The AG states that this high concentration is because there are only two wholesale cellular carriers and that other CMRS services are not substitutes for cellular telephone service. According to the AG, cellular telephone service is the only service available at the present time for consumers who want mobile two-way voice communication,. AG Brief, pp. 6-7.

As evidenced by the number of CMRS providers listed at Appendices 1 and 2, the cellular carriers' claim of future vigorous competition from other mobile services appears to be persuasive. However, at the present time, these claims appear to be without merit. In the Department's opinion, a key difference between cellular service and the other competitive services cited is the capability of interconnecting to the public switched network that only cellular service currently provides. Lack of interconnection makes cellular service "non-substitutable" when compared to paging, SMRS and SMR based services. Additionally, the Department finds that while paging may accommodate some mobile communications by reducing the number of calls carried over the cellular network, and its subscriber cost less than cellular service, it is limited in terms of immediate two-way communications. In the Department's opinion, paging fails to provide the end-user with the ability to conduct two-way communications and interconnect with other telecommunications service end users that cellular service provides. The Department also finds deficient the wholesale providers' argument that SMRS is a competitive alternative to cellular service. The Department believes that while SMRS provides for two way communication, the ability to interconnect with the public switched network is absent. In the Department's opinion, since SMRS operates under a closed system within a limited area, it restricts potential customer subscription because it does not offer the two-way capability that cellular service does.

The cellular carriers have also argued that competition exists from ESMR even though this service is not yet available in Connecticut at this time. Resellers Response to TE-11; Brennan Testimony, p. 9; Springwich Brief, pp. 39-40; Springwich Reply Brief, p. 37. The Department concedes that when ESMR service providers' networks are fully constructed and operational, they may be considered a substitute for cellular service. However, until these service providers are currently operative, the Department does not considered ESMR to be substitutable for cellular, and therefore, the cellular carriers argument it rejected.

Similarly, the cellular carriers argue that the offering of PCS is imminent and will act as a substitute for cellular service. The Department finds that while the FCC has recently finalized the rules under which PCS will be provided, PCS is currently not being

offered in Connecticut. According to the BAMM witness, PCS will not begin to provide significant competition to cellular until 1995 or 1996. BAMM Response to Interrogatory TE-12. Because PCS is unavailable at this time, the Department does not believe that PCS is the competitive threat the cellular carriers have postulated, and as discussed further below, PCS may not become the competitive threat that the wholesale providers have implied for a considerable period of time. Accordingly, the Department finds that there are no current substitutable services for cellular service.

Lastly, during this proceeding, the Herfindahl-Hirschman indices (HHI) for the Connecticut cellular market were separately calculated by Dr. Hausman and Mr. King. The HHI measures market concentration and is often used by the Federal Trade Commission (FTC) and the US Justice Department (DOJ) to determine whether mergers and consolidations should be permitted and to determine the probability of market power exerted by merged companies. Tr. 5/20/94, pp. 782-783. Based on the these calculations, Dr. Hausman calculated the HHI ranging from a minimum of 5,000 for calendar year 1993, to a high of 10,000 in 1987. Tr. 5/16/94, pp. 626-627; 633. The 1987 calculation did not capture BAMM's presence in the Connecticut market. According to the AG, the DOJ considers an HHI above 1,800 as being indicative of a highly concentrated market in which there is a potential for anti-competitive behavior. AG Brief, p. 9. The Resellers state the structure of the Connecticut market has had the serious potential for anti-competitive behavior under HHI analysis since the inception of cellular service in the state. The Resellers also state that the potential for anti-competitive behavior will continue into the future during the transition from a duopoly market to a multi-competitor market as exhibited by high HHIs. Resellers' Brief, p. 22-23. In response, the cellular carriers contend that the Resellers' witness, Mr. King, failed to calculate the HHI correctly by not performing forward-looking calculations using spectrum. BAMM Brief, p. 51.

As noted above, there are no current substitutes for cellular service at this time. The Department believes that while the HHI provides some insight as to the degree of competition in any market, it is clear that the entry of additional service providers (and subsequent provision of service) in the Connecticut marketplace will not occur for some time to follow. The Department notes that in addition to capacity, the DOJ guidelines offer two alternative ways in calculating the HHI: sales and revenue. The Department believes that for purposes of this docket, Mr. King's HHI calculations reflect a more accurate view of the CMRS market because they are based on minutes of use and better reflect the Connecticut market performance. Based on these calculations, the highly concentrated nature of the Connecticut CMRS marketplace will not significantly change before the year 2003. The Department also believes that Mr. King's HHI calculations represent a marketplace that is limited by the number of CMRS providers and the services which they may offer. Accordingly, the competitive threat from other wireless service providers, at present and during the interim period immediately following their entry in the Connecticut marketplace, will be minimal. Consequently, rate regulation of the cellular carriers should continue until it can be satisfactorily demonstrated that wireless service providers are effectively in operation and that true

competition is present in the CMRS marketplace. In order to facilitate the cellular carriers' demonstration that competition is present in Connecticut, the Department will, no later than July 1, 1996, open a proceeding to review the status of competition in the CMRS marketplace in the state. The Department has chosen July 1, 1996, because as projections in the record indicate, PCS and ESMR service providers should be operational in Connecticut and may be competing with the cellular carriers.

5. Opportunities for new entrants that could offer competing services, and an analysis of existing barriers to such entry.

Springwich states that new providers of CMRS will not face any barriers to entry into the Connecticut market and are likely to aggressively offer CMRS services in the state due to the attractive demographic characteristics of the market, including Connecticut's ranking as highest per capita income state. Springwich also states that the Department's jurisdiction over CMRS providers is limited to regulation of wholesale cellular service providers licensed by the FCC, while other mobile services, including ESMRS and PCS are not regulated. According to Springwich, the 1993 Budget Act preempts all state entry regulation of CMRS providers. Reply Brief, pp. 37-38.

The Springwich witness testified that the mobile services industry is one of the most competitive markets for telecommunications services in Connecticut. The Springwich witness also testified that given the large number of mobile service providers together with the broad range of mobile services available to meet their telecommunications needs, choices of CMRS services will more than double next year as the FCC proceeds to license new forms of mobile services such as PCS and other mobile services. According to the Springwich witness, the expansive reach of these new networks will be a significant advantage in serving a certain segment of the mobile service market. Lastly, the Springwich witness testified that the FCC's spectrum allocation is unprecedented and sets the stage for the prompt and competitive introduction of new mobile services in Connecticut. Brennan Testimony, pp. 10-12.

BAMM contends that ESMR service providers have begun to offer a digital mobile telecommunications service that will compete directly with cellular service. According to the BAMM witness, the operation of Nextel's ESMR networks will significantly increase competition in mobile communications. The BAMM witness states that Nextel will cover the entire State of Connecticut by the end of 1995. BAMM also argues that PCS will begin to provide significant new competition to cellular resulting from the FCC's spectrum auction. According to BAMM, PCS will begin to provide significant new competition to cellular starting in 1995 or 1996. The BAMM witness also states that another new voice mobile service is planned to be offered by Geotek. The BAMM witness stated that Geotek has acquired 900 Mhz frequencies in major markets across the country, and has announced plans to provide voice mobile, dispatch and other services utilizing advanced digital technology beginning in 1995. BAMM Response to Interrogatory TE-12.

Relative to entry barriers, the BAMM witness testified that no barriers to entry should exist in Connecticut. The BAMM witness also testified that the growth in cellular service has been at the rate of about 35-40% a year over the past five years with rapid growth expected to continue beyond the year 2000. According to the BAMM witness, rapid growth is one of the primary factors which causes firms to enter new markets. Additionally, the BAMM witness points to Nextel's construction of its ESMR network in Connecticut in which it has not encountered barriers to entry delaying or stopping its construction. Therefore, BAMM believes that no significant barriers to entry should exist in Connecticut. Id.

The Resellers contend that the opportunities for new entrants continue to remain uncertain at this time and have had no affect on the cellular carriers' current exercise of substantial power. According to the Resellers, it is the uncertainty of when the Connecticut marketplace will become fully competitive that justifies the Department's seeking authority to protect state consumers through continued rate regulation. The Resellers also argue that the presence of Nextel may not benefit existing consumers in any event. The Resellers state that Nextel's presence will likely fragment the market and create a barrier to direct competition with cellular service because Nextel will use single mode, digital phones. According to the Resellers, this will prevent subscribers from changing services or carriers without reinvesting in equipment, limit churn for Nextel, and be a negative selling point because of the lack of equipment transportability. Reseller's Response to Interrogatory TE-12.

The Resellers also contend that the most significant prospect for new entrants will be from PCS licensees. However, the Resellers question when this will occur and whether the entrants will be commercially viable competitors. According to the Resellers, for Connecticut consumers to benefit from full competition, there must be new entrants able to compete and survive in a market where the two current cellular providers exercise substantial market penetration and market power. Id.

Relative to barriers to entry, the Resellers state that the prospect of additional competitors entering the Connecticut marketplace is encouraging in an industry where it is widely recognized that full competition has been lacking. The Resellers cite a Donaldson, Lufkin & Jenrette (DLJ) opinion that the lack of national licenses is a competitive advantage for existing operators. The Resellers also point to the high cost of entry into the CMRS market as an obstacle for new entrants. For example, according to the Resellers, government estimates place the auction value of the spectrum at $10B and an additional $3B to move or relocate those microwave users currently operating within the dedicated frequencies. According to the Resellers, these costs are only spectrum acquisition costs and do not include build-out costs and other equipment costs. Lastly, the Resellers state that another competitive advantage for existing cellular carriers is the FCC's decision not to create national licenses which analysts view as an impediment that could further increase cost. Id.

Currently, competition in the CMRS market in Connecticut from other wireless service providers is virtually non-existent. Tr. 5/13/94, p. 157; BAMM Brief, p. 23; BAMM Response to Interrogatory TE-12; Brennan Testimony, p. 12; Resellers' Response to Interrogatory TE-12. BAMM also states that PCS will begin to provide significant new competition to CMRS market beginning in 1995 or 1996. BAMM Response to Interrogatory TE-12. While the Department believes that PCS and ESMR service providers will begin to compete with the cellular carriers upon their entry to Connecticut, we do not believe that competition will be significant for some period of time to follow. For example, while the FCC has scheduled spectrum auctions to begin as early as July 26, 1994, (BAMM Brief, p. 25) this auction will award licenses for ten nationwide narrowband spectrum blocks for non-voice services. Auctions for the remaining PCS licenses are scheduled for late 1994. In the Department's opinion, even if those PCS licensees purchasing spectrum at the July 27, 1994 auction were to immediately begin providing service, we would expect competition to be limited primarily for two reasons. First, the licenses issued initially will be for non-voice services only. As discussed above, the Department believes the attraction to cellular service is two-way voice communication, and therefore, we would expect competition for this service to be limited. Secondly, if there is demand for non-voice services provided by these PCS licensees, in order to be fully competitive, they will require time to establish themselves in the given market, and to build a customer base in order to effectively compete. Likewise, following the issuance of the remaining PCS licenses, the successful licensees will require time to construct their networks and build a customer base. Therefore, effective competition in the CMRS market will not exist for some period of time.

The Department also finds that the FCC has relaxed its system construction rules to give successful PCS licensees more time, from seven to ten years to serve the population within their respective service territories. Tr. 6/20/94, p. 1717. In the Department's opinion, this revision to the FCC's rules will more than likely slow down the PCS licensees' system buildout and as a result, delay the provision of PCS to entire service territories. This delay in construction will also result in a delay in effective competition in those areas. The FCC has also elected to reserve more than 1,000 PCS licenses for small businesses, women and minority groups. The Department believes that given this directive, deployment of the PCS technology and resulting competition may be further delayed as the prospective licensees attempt to raise the required capital to finance their operations. Additionally, further delay by these licensees may result as the FCC inspects these licensees to ensure compliance with the appropriate ownership rules.

Similarly, the Department does not believe that competition from ESMR providers will be imminent nor significant because Nextel will not be entering the Connecticut market until some time during the first half of 1995. The Department finds Nextel and other ESMR providers, like PCS, will require time to build their respective customer bases in order to effectively compete. The Department also finds that one factor that may stifle competition from Nextel, at least initially, is its plan to use single

mode, digital phones. In the Department's opinion, this could create a barrier to direct competition and prevent subscribers from readily changing services or carriers without reinvesting in equipment. Although Motorola will more than likely address the equipment situation, the Department believes that this may be an additional reason as to why competition in the CMRS market will not be as "significant" as the cellular carriers conclude.

Regarding an analysis of existing barriers to entry, the Department finds that while the cellular carriers claim that there are no barriers to entry, the cost to "play" may be significant. According to the Resellers, estimated spectrum acquisition costs could exceed $13B while equipment costs are currently under review. The Department believes that the spectrum allocation costs together with other construction costs, while not acting as a barrier to entry, could lead to delayed deployment of the PCS system and technology. Therefore, based on the above, the Department finds that the opportunities for new entrants to enter the Connecticut marketplace may be limited, and eventual entry by alternative service providers will not occur until the 1995 to 1996 time period.

6. Specific allegations of fact (supported by an affidavit of a person or persons with personal knowledge) regarding anti-competitive or discriminatory practices or behavior on the part of CMRS providers in the state.

Springwich states that the proponents of continued rate regulation of the wholesale cellular carriers have failed to produce any legitimate, sustainable claims of anti-competitive or discriminatory practices or behavior by the wholesale cellular carriers. According to Springwich, the overwhelming majority of practices alleged by the proponents of continued regulation have already been found by the Department or the FCC to be non-discriminatory and in the public interest, including specifically the tiered structure of Springwich's wholesale tariff, the practice alleged by the proponents of an FCC petition to be the most discriminatory practice. Springwich contends that the remaining allegations of anti-competitive or discriminatory conduct emanate primarily from a reseller in financial distress whose credibility and veracity are questionable. Springwich Reply Brief, p. 38. BAMM states that miscellaneous reseller complaints about Connecticut wholesale cellular market conditions do not justify continued rate regulation by the Department. BAMM Brief, p. 59.

In contrast, the Resellers contend that the record is replete with specific instances of anti-competitive behavior on the part of the cellular carriers. The Resellers also state that the record of the instant proceeding shows a pattern of anti-competitive activity on the part of the cellular carriers which has restrained independent retail cellular providers. Specifically, the Resellers point to the combining of the management personnel between the wholesale and retail operations of the cellular carriers and their retail affiliates, as well as the overall business operations as sources of much of the anti-competitive activity. For example, the Resellers note the relationship between

Springwich and its retail affiliate SNET Mobility which are located in the same building and share the same floor. The Resellers also contend that the Vice President of Finance for SNET Mobility, the "defacto financial officer" of the general partner of Springwich, is in charge of wholesale pricing, and is also involved in retail pricing decisions. The Resellers argue that Springwich and SNET Mobility are financially "assessed" (sic), and determine their pricing strategies a consolidated basis. According to the Resellers, there are no separate pricing strategies for Springwich and SNET Mobility. The Resellers also contend that BAMM operates substantially in the same manner, except that the retail arm is a division within the same company. The Resellers contend that there is no separation between wholesale and retail operations. The Resellers contend that the BAMM regional Vice President manages both the retail and wholesale functions of BAMM, and is involved with both retail and wholesale pricing decisions. Resellers' Brief, pp. 24-25.

The Resellers also state that the record of the instant proceeding shows a litany of additional anti-competitive acts on the part of the cellular carriers. For example, the Resellers claim that the retail affiliates of the carriers are privy to advance notice of wholesale pricing and promotional activities. The Resellers further state that more generally, the retail arms receive advance notice of all wholesale pricing or promotional strategies or plans, because the individuals responsible for wholesale pricing are the same people responsible for retail pricing. The Resellers also contend that this problem exists in reverse in that through the wholesale supplier relationship with the independent Resellers, the carriers are privy to the marketing plans and sales strategies of the independent resellers. Id., pp. 25-26

The Resellers claim that misconduct involving pricing and market tampering matters occur. For example, the Resellers cite instances wherein employees of the Springwich parent (SNET Cellular) met with cellular service resellers to discuss retail rates and the impact independent reseller rates would have on the Springwich retail affiliate. According to the Resellers, for numerous years SNET Cellular inquired on a quarterly and monthly basis as to the rate plans another cellular service reseller has in effect. Additionally, on several occasions, representatives of Springwich's retail affiliate have contacted another cellular service reseller to complain that its retail rates were too low, and to encouraged the company to maintain higher retail prices.

The Resellers state that another anti-competitive and discriminatory practice is the upside-down pricing between the cellular carriers' bulk wholesale rates and the retail rates charged by the cellular carriers' retail arms. Specifically, the Resellers contend that retail arms of the cellular carriers have offered and/or presently maintain rate plans which are less than the rate that independent retail buyers can purchase bulk service from the wholesale service providers. According to the Resellers, not only does this practice have the effect of excluding independent resellers from certain retail market segments, the practice becomes particularly egregious in the context in which it occurs. According to the Resellers, this upside-down pricing practice is a textbook case of anti-competitive and discriminatory conduct. In addition to the above, the Resellers

state that a similar and more blatant case of price discrimination is occurring at the wholesale level. Specifically, Springwich's tiered tariff, is discriminatory so that its retail affiliate qualifies for a wholesale rate which is lower than the best wholesale rate the other independent cellular resellers can obtain. Id., pp. 27-28.

The Resellers also claim that Springwich has used its creditor relationship with the cellular resellers in an abusive and anti-competitive manner. In particular, the Resellers contend that Springwich has violated the terms of its own tariff with respect to interest charges by commencing the accrual of interest before the 30 day grace period, and by charging excessive interest rates by charging interest upon interest. The Resellers also claim that Springwich has placed liens upon the cellular resellers' assets and uses its collateralized position and credit relationship to coerce the resellers from appearing before the Department. The Resellers further contend that Springwich has forced cellular service resellers into confidentiality agreements which prohibit them from disclosing or complaining about the nature of these coercive credit relationships. The Resellers state in the context of an industry which is subject to regulatory oversight, the existence of agreements which prevent parties from petitioning the Department under threat of suit for breach of agreement are contrary to public policy, frustrate regulatory oversight and are anti-competitive. Lastly, the Resellers indicate that other discriminatory and anti-competitive practices include preferential phone activation for Springwich's cellular retail affiliate. Id., pp. 28-30.

The OCC states that there is sufficient evidence of anti-competitive or discriminatory practices to justify continued regulation of wholesale cellular carriers. According to the OCC, the extensive evidence of Escotel (a cellular service reseller) regarding unfair and discriminatory wholesale cellular pricing and billing practices, as well as specific actions by Springwich, provide incontrovertible evidence that market conditions in Connecticut do not protect subscribers, and that anti-competitive and discriminatory practices are prevalent. OCC Brief, p. 9.

The OCC concurs with the Resellers that the wholesale cellular rate structure inhibits effective competition. The OCC contends that while rate discounts for larger customers may initially appear to be non-discriminatory, the reality is that this wholesale cellular rate structure discriminates against the smaller, independent resellers and has effectively suppressed competition among those resellers which are not affiliated with the wholesale carriers. According to the OCC, the effect over time of the wholesale cellular rate structure has been to increase the market share of Springwich and BAMM and to reduce the market share of smaller, independent resellers. The OCC notes that while the number of independent resellers in Connecticut has increased since 1987, their total share of the resale market in terms of average monthly minutes of use has decreased. The OCC further notes that some resellers have even dropped out of the Connecticut market because of entry barriers. The OCC states that the wholesale cellular pricing structure, therefore, is anti-competitive, as evidenced by the suppression of growth by independent resellers. Id., pp. 9-10.

The OCC also contends that resellers are unfairly billed for overlapping calls. The OCC states that although wholesale cellular carriers have the technical ability to bill for usage in increments of one-tenth of a minute, resellers are charged for larger increments of time, regardless of actual usage. As a result, resellers may be charged twice for the same minute(s) of use, if two calls overlap during a given minute. According to the OCC, resellers are in effect, billed for usage which does not exist. OCC Brief, pp. 10-11. The AG concurs and notes that this billing practice results in a significant amount of overcharges to consumers. AG Brief, p. 17.

The OCC argues that Springwich has unfairly refused to provide credits for dropped calls and has unfairly refused to provide credits to Escotel for calls which should be considered dropped calls. The OCC claims Springwich has established unnecessary barriers which ensure that end users and resellers pay for most dropped calls, regardless of the fact that they did not receive full value for such calls. The OCC also claims that even when Escotel complied with Springwich's credit policy, credits were denied. According to the OCC, Springwich's actual credit policy is different from its written policy, because it does not require the end user to request a credit, but rather credits the reseller only when the credit is passed to the cellular reseller's end user. The OCC argues that Springwich is unfairly benefiting from dropped calls, to the detriment of both Escotel, and presumably other resellers, as well as end users. OCC Brief, pp. 12-15. The AG agrees, and contends that Springwich has placed an enormous burden on its customers by requiring them to submit detailed proof of dropped calls to get a credit. According to the AG, as a result, the wholesale carriers get a windfall they do not deserve at consumer's expense. AG Brief, p. 17.

The OCC also contends that Springwich resellers are unfairly denied equal access to all interexchange carriers (IXCs). According to the OCC, resellers of Springwich are unfairly required to have their end users use SNET America, an interstate long distance carrier, and an affiliate of Springwich. The OCC states that as a result, SNET America benefits not only from having captive end users, but also from Springwich's practice of billing for SNET America calls in full minute increments. The OCC also states that this practice is contrary to the normal procedure of recording and billing for wholesale interexchange calls in six second increments. The OCC concludes that there is not justification for denying end users equal access to IXCs or for charging for more than actual usage. According to the OCC, Springwich's anti-competitive policy is further evidence of the need for continued regulatory oversight of wholesale cellular carriers. Id., p. 16. The AG agrees and contends that this is another example of how the wholesale cellular market does and will function in the absence of regulatory oversight, to the harm of consumers. According to the AG, this is another reason why the Department should not forfeit its regulatory authority. AG Brief, p. 18.

Lastly, the OCC concurs with the Resellers that they are unfairly disadvantaged by the relationship between the wholesale cellular carriers and their affiliated resellers. The OCC states that the instant proceeding is replete with testimony regarding the unfair competitive disadvantage of the independent resellers, as a result of the close

relationship between Springwich and its retail cellular affiliate, SNET Mobility, which provides all of the operational services to Springwich. The OCC also states that these services include engineering, installation and maintenance of the network, regulatory and financial services, and direct contact with customers. The OCC also makes note of the competitive advantage that Springwich's retail affiliate has in pricing and promoting its retail cellular service to the detriment of other resellers. As an example of this competitive disadvantage, the OCC notes how a SNET Cellular wholesale employee became familiar with resellers' marketing plans, and then became the head of SNET's retail cellular operations. The OCC contends that Springwich's retail affiliate has received an unfair competitive advantage because it has the most prominent advertising in every Southern New England Telephone Company Yellow Pages directory section. Additionally, the OCC believes that the Springwich retail affiliate has also had an unfair advantage in being able to activate cellular numbers for customers at any time, including weekends and holidays, while its competitors do not have this ability. OCC Brief, 17-20.

The AG contends that the wholesale cellular carriers have engaged in anti-competitive conduct against resellers. According to the AG, the cellular carriers have structured their affiliation with retail arms so that significant amounts of vertical integration are located at the same physical site, or some of the same persons are involved in pricing decisions for the retail and wholesale arms of the carriers. The AG states that this has resulted in the cellular carriers giving their retail arms early access to market information. Additionally, because the wholesale operations request and obtain financial information on the independent resellers, the AG states that in some cases the retail affiliates of the cellular carriers have come into possession of this information. The AG also states that evidence has been presented that the cellular carriers have overtly sought or tried to steer independent resellers away from providing service to certain types of customers. The AG contends that ultimately these practices harm consumers by reducing competition and they are just one more sign that the cellular market alone cannot protect consumers from unreasonable rates. AG Brief, p. 19.

As indicated above, the Resellers, AG and OCC have identified what they believe to be specific examples of anti-competitive behavior on behalf of Springwich and BAMM. The Department believes that these are more than allegations from a dissatisfied reseller and are specific examples of a non-competitive environment that requires further review and regulation by the Department. In the Department's opinion, the worst example of anti-competitive behavior appears to result from the cellular carriers' relationship with their affiliated resellers. While Springwich argues that "this relationship is well known to the Department and has been discussed in several dockets," (Springwich Reply Brief, p. 16), the Department notes that at the times of these reviews, we did not contemplate the current level of competition between Springwich's retail affiliate and the independent cellular resellers. Additionally, at the time of those proceedings, the CMRS market was not as fully developed as it is today nor did we consider the levels of competition currently existing between the carriers,

and the size (in terms of cellular numbers activated) of their retail affiliates compared to the independent resellers. In the Department's opinion, there have been significant changes in the telecommunications market in Connecticut since the January 16, 1985 Decision in Docket No. 84-08-16, Southern New England Telephone Company Tariff Filing to Provide Bulk Domestic Cellular Radio Telecommunications Service, and the March 30, 1988 Decision in Docket No. 87-10-23, SNET Cellular, Inc.'s Proposed Revision to Its Tariffs, were issued. While Springwich states that it is following the FCC's cost allocation manual and the uniform system of accounts for its wholesale and retail operations, the Department believes that the wholesale/retail relationship in terms of economies of scale, common management, and pricing decisions goes beyond following established cost accounting procedures. Based on the record of this proceeding, the Department questions the role of Springwich's management and the effects its pricing decisions have had on the carrier's retail affiliate and the independent resellers. In the Department's opinion, this relationship and its impact on the degree of competition at the retail level are questionable and should be the subject of further Department investigation.

The Department is also concerned with the alleged anti-competitive practices of the cellular carriers relative to their relationship with the Resellers. Additionally, evidence exists of coercion by one of the cellular carriers towards its reseller customers. Tr. 6/3/94, pp. 1029, 1053. The record indicates that Springwich's customers have been required to discuss their retail rates and competitive pricing strategies with the cellular carrier which may have resulted in more favorable treatment for Springwich's retail affiliate. Tr. 5/20/94, pp. 807-808. This allegation of anti-competitive and behavior by Springwich warrants further review by the Department.

The Department also finds fault with Springwich's requirement that interstate long distance calls be carried by its affiliate, SNET America. Springwich has recently required its customers to switch their long distance carrier from AT&T to SNET America. Tr. 6/3/94, p. 1011. While Springwich's affiliate, the Southern New England Telephone Company was never subject to the FCC's requirements to provide for equal access, Springwich should have provided for interstate equal access in the spirit of competition. In the Department's opinion, Springwich's failure to provide for equal access conflicts with the Connecticut General Assembly and the Department's policy to promote telecommunications competition in Connecticut (See for example Public Act 94-83, An Act Implementing the Recommendations of the Telecommunications Task Force, and the Department's July 7, 1993 Decision in Docket No. 91-10-06, DPUC Review of Telecommunications Policies: Infrastructure Modernization, Competition, Pricing Principles and Methods of Regulation) and also should be the subject of further review.

Accordingly, the Department, will at the conclusion of this docket, as part of the investigation discussed above, review the wholesale cellular carrier and retail affiliate relationships of Springwich/SNET Cellular and BAMM. The Department will also investigate the competitive practices of the cellular carriers relative to their relationship with the Resellers. The purpose of this review will be to ensure that there is a proper

mix of management between the cellular carriers' wholesale and retail operations as well as the development of a proper wholesale/retail relationship between service provider and reseller, when the Department forebears from rate regulation. The Department will also, as part of its investigation address specific Reseller/customer issues (e.g., wholesale cellular pricing and billing practices, credits policies, Springwich's failure to provide interstate equal access, etc.). The Department will also review the relationship between the cellular carriers' costs and their respective rates and charges. The Resellers also argue that the cellular carriers' retail affiliates currently offer rate plans which are purchased at a lower cost than the rate the independent resellers can purchase bulk service from the wholesale service providers. The Department recognizes that this benefit results from the economies of scale inherent in the Springwich and BAMM tiered pricing structures. Nevertheless, the great disparity between the rates and charges the independent resellers currently experience for bulk wholesale cellular service when compared to that experienced by cellular carriers' retail affiliates require further review. Therefore, as part of the Department's investigation into the cellular carriers' rates, we will review the BAMM and Springwich tiered pricing structures to determine if they should be adjusted to be more equitable to the other resellers.

Lastly, the OCC and AG disapprove of the carriers billing practices relative to overlapping calls. The Department notes that the cellular carriers' billing practices relative to overlapping calls are consistent with those employed by Connecticut's local exchange companies (LECs) when providing message toll service in Connecticut. The Department is also aware of certified competitive service providers operating in the state that bill in varying increments. While Springwich currently has the capability of billing in 30 second increments, it does not bill subscribers in this manner. During the subsequent proceeding noted above, Springwich will also be required to demonstrate why it is currently billing on a per minute basis rather than 30 second increments (or lower) in order to promote CMRS competition in the State.

8. Information regarding customer satisfaction or dissatisfaction with services offered by CMRS providers, including statistics and other information regarding complaints filed with the state regulatory commission.

Springwich states that the continual double digit growth of cellular penetration demonstrates the general level of customer satisfaction with cellular services. Springwich also states that the record does not contain any evidence of statistics or complaints from cellular end users in Connecticut. Springwich claims that all complaints received by the cellular carrier since 1985 have been resolved, with only two matters ever being brought to the Department's attention. Springwich Response to Interrogatory TE-14; Reply Brief, p. 39.

BAMM states that it has no statistics or other information regarding complaints against the cellular carriers. BAMM also states that it is unaware of any reseller

dissatisfaction or complaints about services offered by the wholesale cellular service providers. BAMM contends that evidence of customer satisfaction with its wholesale service is that there have been no reseller objections to the company's tariff filings. In addition, BAMM believes that since its initiation of service, the company has evidenced a steady pattern of price reductions, tariff modifications making service more accessible and less expensive to utilize, and introduction of competitive new services coupled with service improvements and increased coverage. BAMM Response to Interrogatory TE-15.

The Resellers contend that as a general matter, consumers complain about the high cost of cellular service which can be attributed to the excessive prices of the wholesale providers. Additionally, the Resellers claim that other consumer complaints also originate from the cellular carriers' practices. According to the Resellers, these include end users' inability to select their own long distance carrier, frustration over the loss of their phone number when switching cellular carriers, and the high costs of roaming charges. Reseller Responses to Interrogatories TE-15 and TE-16.

The Department has reviewed the above and finds that the record is devoid of any comments or information concerning customer satisfaction with services offered by CMRS providers. Additionally, given the testimony presented by Mr. Escobar concerning Springwich's coercive tactics, it is understandable why the Department has not received any written complaints concerning the provision of bulk wholesale cellular service. As noted above, sufficient customer dissatisfaction with cellular carriers in terms of pricing, service credits, and the lack of interstate equal access has been adequately demonstrated. In addition, the testimony of Mr. Escobar (attached hereto as Appendix 4) indicates an industry with a sufficient level of customer dissatisfaction that should be addressed prior to deregulating the Connecticut CMRS industry. Consequently, our investigation shall include review of the practices of the cellular carriers and will address these issues raised by the Resellers during this proceeding.

C. SUMMARY

The record of this proceeding indicates that currently, effective competition in the CMRS market is not at the level that would permit the Department to discontinue rate regulation. Sufficient competition will most likely exist following the ESMR and PCS providers' entry into the Connecticut marketplace. Based on the record of this proceeding, the Department believes that these service providers will not be in a position to effectively compete with the cellular carriers for approximately one to two years following their entry. On July 1, 1996, the Department will open a proceeding to review the status of CMRS competition in Connecticut and act accordingly. During the interim period, the Department believes that rate regulation of the cellular wholesale providers is in the public interest and should be continued. Accordingly, the Department has determined that it is in the best interest of the cellular consumers to petition the FCC to retain regulatory authority over the bulk wholesale cellular service providers. Additionally, as noted above, the Department will also address the various

issues raised during this proceeding to facilitate movement from a regulated environment to one where effective competition may begin to develop.

III. FINDINGS OF FACT

1. The 1993 Budget Act preempts state and local rate and entry regulation of all commercial mobile radio services effective August 10, 1994.

2. States that have rate regulation in effect as of June 1, 1993 may petition the FCC to extend that authority based on a showing that (1) market conditions with respect to such services fail to protect subscribers adequately from unjust and unreasonable rates or rates that are unjustly or unreasonably discriminatory or (2) such market conditions exist and such service is a replacement for land line telephone exchange service for a substantial portion of the telephone land line exchange service with such state.

3. The FCC provided the states with the discretion to submit whatever evidence they believe was persuasive regarding market conditions and the lack of protection for CMRS subscribers in the state.

4. States seeking to demonstrate that continued rate regulation is appropriate because CMRS is a replacement for landline telephone exchange service provided within the state, must demonstrate that market conditions are such that they do not protect subscribers adequately from unjust and unreasonable rates, or rates that are unjustly or unreasonably discriminatory, and a substantial portion of the CMRS subscribers in the state or a specified geographic area have no alternative means of obtaining basic telephone service.

5. The evidentiary record of this proceeding does not support a finding that CMRS is a replacement for landline telephone exchange service for a substantial portion of the telephone landline exchange service within Connecticut.

6. True competition will not exist in the CMRS market until the other wireless service providers have begun providing service and are effectively competing with the incumbent service providers.

7. The record of this proceeding is inconclusive relative to the cellular carriers' rate of return and their financial performance since 1987.

8. The financial analysis conducted by Mr. King and Dr. Hausman have provided a range of reasonable rates of return that must be further investigated because of the material difference between the upper and lower limits of this range.

9. A reduction in the advance notice of rate changes to the cellular carriers' customers from 30 days to five days is reasonable and consistent with the regulatory treatment

afforded competitive telecommunications service providers pursuant to Connecticut Public Act 94-83.

10. Reasonable bulk wholesale cellular rates will necessarily result as other CMRS providers enter the Connecticut marketplace in a deregulated environment.

11. Paging may accommodate some mobile communications by reducing the number of calls carried over the cellular network, and its subscriber cost less than cellular service; however, it is limited in terms of immediate two-way communications. Paging fails to provide the end user with the ability to conduct two-way communications and interconnect with other telecommunications service end users that cellular service provides.

12. Although SMRS provides for two-way communication, it is unable to interconnect with the public switched network. Because of the manner in which SMRS operates (e.g., under a closed system and within a limited area) it restricts potential customer subscription because it does not offer the two-way capability that cellular service does.

13. Since ESMR is not in operation it cannot be considered a substitutable service to cellular service at this time.

14. PCS will not begin to provide significant competition to cellular until 1995 or 1996; and therefore, it is not the current competitive threat the cellular carriers have postulated.

15. There are no current substitutable services for cellular service.

16. The competitive threat from other wireless service providers, at the present time and during the interim period immediately following their entry in the Connecticut marketplace will be minimal.

17. The FCC has relaxed its system construction rules to give successful PCS licensees more time, from seven to ten years to serve the population within their respective service territories. The revised FCC rules will more than likely slow down the PCS licensee's system buildout and as a result, delay the provision of PCS to entire service territories and therefore, effective competition.

18. Rate regulation of the cellular carriers should continue until they can satisfactorily demonstrate that other CMRS are effectively operating in their service territories and true competition is present in the marketplace.

19. While the entry of the new service providers (i.e., PCS and ESMR) will likely enhance the level of competition in the cellular marketplace in Connecticut, their entry will not be until 1996 time frame.

20. The cost to prospective wireless service providers to enter the Connecticut CMRS market may be significant due to estimated spectrum acquisition costs, and other costs and therefore, opportunities for new entrants to enter the Connecticut marketplace may be limited.

21. There have been significant changes in the telecommunications market in Connecticut since the January 16, 1985 Decision in Docket No. 84-08-16 and the March 30, 1988 in Docket No. 87-10-23 were issued.

22. The role of Springwich's management on pricing decisions on the carrier's retail affiliate and independent resellers as well as its impact on the degree of competition at the retail level is questionable and should be the subject of further Department investigation.

23. Springwich has required its customers to discuss their retail rates and competitive pricing strategies with the cellular carrier which may have resulted in more favorable treatment for Springwich's retail affiliate.

24. Springwich has recently required its customers to switch their long distance carrier from AT&T to SNET America. Springwich's failure to provide for equal access conflicts with the Connecticut General Assembly and the Department's policy to promote telecommunications competition in Connecticut.

25. The disparity between the rates and charges the independent resellers currently experience for bulk wholesale cellular service when compared to that experienced by cellular carriers' retail affiliates require further review.

26. The Department has reviewed the above and finds that the record is devoid of any comments or information concerning customer satisfaction with services offered by CMRS providers.

IV. CONCLUSION AND ORDERS

A. CONCLUSION

Currently, effective competition in the CMRS market is not at the level that would permit the Department to discontinue rate regulation. Competition will begin following the ESMR and PCS providers' entry into the Connecticut marketplace. The Department believes that these service providers will not be in a position to effectively compete with the cellular carriers until at least approximately one to two years following their entry. On July 1, 1996, the Department will open a proceeding to review the status of CMRS competition in Connecticut. During the interim period, rate regulation of the cellular wholesale providers is in the public interest and should be continued. The Department will also address other various issues raised during this proceeding to facilitate

movement from a regulated environment to one where effective competition may begin to develop. Accordingly, the Department concludes that it should petition the FCC to retain jurisdiction over the bulk wholesale cellular service rates and charges until at least the conclusion of its July 1, 1996 investigation docket.

B. ORDER

1. The cellular carriers shall submit revised tariffs no later than August 22, 1994, consistent with Section II.B.3 above.

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Docket Title

DPUC INVESTIGATION INTO THE CONNECTICUT CELLULAR SERVICE MARKET AND THE STATUS OF COMPETITION

This Decision is adopted by the following Commissioners.

Thomas M. Benedict

Evan W. Woollacott

Michael J. Kenney

CERTIFICATE OF SERVICE

The foregoing is a true and correct copy of the Decision issued by the Department of Public Utility Control, State of Connecticut, and was forwarded by Certified Mail to all parties of record in this proceeding on the date indicated.

Robert J. Murphy — 08/08/94

Robert J. Murphy
Executive Secretary
Department of Public Utility Control

Date

CONNECTICUT PAGING LICENSEES

RADIO COMMON CARRIERS

1. AMERICAN PAGING
2. ARCH CT VALLEY
3. CARRIER COMMUNICATION CORP
4. COM NAV MARINE, INC.
5. CONTACT COMMUNICATIONS
6. MASS CT
7. MESSAGE CENTER
8. METRO CALL
9. METROMEDIA
10. METRONET OF NEW YORK
11. MID ATLANTIC
12. MILLICON
13. MOBILECOMM NATIONWIDE
14. NATIONAL BEEPER
15. O.R. ESTMAN
16. PAGE AMERICA
17. PAGENET
18. PAGING PARTNERS
19. RADIO PHONE
20. RADIO RELAY
21. RAM COMMUNCIATIONS
22. SKYTEL/MTEL
23. SNET PAGING
24. SOUTHLAND HOLDINGS
25. TNI ASSOCIATES, INC.
26. TRI STATE PAGING

PRIVATE CARRIERS

1. AMERICA SATELLITE
2. BEEPAGE
3. CITINET
4. FIRST NATIONAL PAGING CO.
5. GREEN LINE PARTNERS
6. MAP MOBILE
7. MARCUS COMMUNICATIONS
8. METAGRAM
9. PACTEL
10. PAGEMART
11. PAGETEL
12. PRO NET
13. TRI STATE RADIO

SPECIALIZED MOBILE RADIO (SMR)

LICENSEES IN CONNECTICUT

SMR BAND 851-866 MHz

1. AMERICAN MICROSIGNAL CORP
2. AMK COMMUNICATIONS INC. (NEXTEL)
3. AUTOCOM INC.
4. BARNETT, SHERI
5. BELL, CARL E.
6. BIGHINATTI, DONALD
7. BRANSON, LESLIE
8. CELLULAR NETWORK, INC.
9. COMMUNICATION SPECIALIST INC.
10. DISPATCH COMMUNICATIONS (NEXTEL)
11. GANDOLFO, JUDITH A.
12. GENERAL COMMUNICATIONS INC.
13. HOWARD A. MCAULIFFE INC.
14. INDUSTRIAL COMMUNICATIONS &
15. JESSICA ZACHS INC.
16. KEMP COMMUNCIATIONS INC.
17. LOOMIS III, TOM S.
18. MANTZ, LUCY
19. MARCUS COMMUNICATIONS INC.
20. MCDONALD COMMUNICATIONS
21. METROLINK MOBILE TELEPHONE
22. MORRISEY, RICHARD
23. MOTOROLA INC.
24. PROGRESSIVE COMMUNICATIONS
25. SKIERKA, RICH
26. SMART SMR OF NEW YORK INC.(NEXTEL)
27. THREE WAY COMMUNICATIONS INC.
28. TRS INC
29. ULLATHORNE, IAN
30. ZACHS, HENRY M.

SMR BAND 935-940 MHz

1. ACTIVATED COMMUNICATIONS INC.
2. BERKLE, FRANCES H.
3. CLEAR CHANNEL COMMUNICATIONS
4. DANOFF, ED
5. MILLICOM RADIO TELEPHONE COM.
6. POWER SPECTRUM OF HARTFORD
7. RAM MOBILE DATA USA LIMIED
8. RAM MOBILE DATA USA LP
9. RAWLINSON, CAREY L.
10. STETTER, JOHN
11. WANG, RICHARD Y C

SPRINGWICH CELLULAR LIMITED PARTNERSHIP

T A R I F F S

CONSISTING OF

TABLE OF CONTENTS

PART I. BULK DOMESTIC PUBLIC CELLULAR RADIO TELECOMMUNICATIONS SERVICE

PART II. PUBLIC CELLULAR RADIO EMERGENCY SERVICE

EFFECTIVE RATES

FOR SERVICES FURNISHED IN THE
STATE OF CONNECTICUT

AMENDMENTS AND ADDITIONS TO THESE TARIFFS WILL BE COVERED BY ADDITIONAL PRINTED SHEETS OR NEW SHEETS REPLACING THOSE AFFECTED BY CHANGES. ADDITIONS AND CHANGES WILL BE INDICATED BY THE FOLLOWING SYMBOLS:

(C) TO INDICATE CHANGED RATE OR REGULATION.
(D) TO INDICATE DISCONTINUED RATE OR REGULATION.
(I) TO INDICATE INCREASE.
(N) TO INDICATE NEW RATE OR REGULATION.
(R) TO INDICATE REDUCTION.
(T) TO INDICATE A CHANGE IN TEXT BUT NO CHANGE IN REGULATION.

ISSUED BY MARK W. BLUEMLING, VICE PRESIDENT - FINANCE
SNET CELLULAR, INC., GENERAL PARTNER OF
SPRINGWICH CELLULAR LIMITED PARTNERSHIP
555 LONG WHARF DRIVE, NEW HAVEN, CONNECTICUT 06511

Sheet

PART I BULK DOMESTIC PUBLIC CELLULAR RADIO TELECOMMUNICATIONS SERVICE

A. General

1. Definitions 1

2. Regulations
a. Availability of Service 3
b. Limitations of Liability. 3
c. Use 5
d. Disconnection, Termination or Temporary Suspension of Service 5
e. Restoration of Service. 5
f. Payment of Rates and Charges. 6
g. Use of Marks. 6
h. Cellular Number 6

3. Special Conditions
a. Operator Assistance 7
b. Application for Service 7
c. Credit Information and Security 7
d. Minimum Requirements. 8
e. Billing 9

B. Rates and Charges

1. Timing of Usage 10

2. Rate Periods for Usage. 11

3. Initial Service
a. Request for Cellular Numbers. 11
b. Service Order 12

4. Basic Service 12
a. Cellular Numbers. 13
b. Usage Rates for Originated and Terminated Calls 14
c. Optional Features 15
d. Discounts 17

PART II PUBLIC CELLULAR RADIO EMERGENCY SERVICE

A. General

1. Regulations 1

B. Rates and Charges

1. Initial Service
a. Service Order 2

2. Basic Service
a. Cellular Numbers. 2
b. Usage Beyond 65 Minutes Per Month 2

BULK DOMESTIC PUBLIC CELLULAR RADIO TELECOMMUNICATIONS SERVICE

A. GENERAL

This Tariff contains regulations, rates and charges applicable to the provision of Bulk Domestic Public Cellular Radio Telecommunications Service ("Bulk Cellular Service") furnished by the licensee and operator, Springwich Cellular Limited Partnership ("the Company") to subscribers who may use or retail this Bulk Cellular Service to others provided the subscriber and its end-users meet the criteria stated under this Tariff. (T)

The subscriber or end-user must provide and maintain all cellular mobile radio unit(s) and ensure that such unit(s) are technically and operationally compatible with this Bulk Cellular Service and in compliance with applicable Federal Communications Commission rules and regulations. The use of cellular mobile radio units in airplanes and helicopters is not permitted under FCC rules.

The operating characteristics of such unit(s) shall be such as not to interfere with the Bulk Cellular Service offered by the Company.

The General Regulations of The Southern New England Telephone Company Tariffs Part I are incorporated by reference, except as modified herein.

Bulk Cellular Service provided herein is subject to this tariff and any applicable state and federal regulations and laws.

1. Definitions

a. Cell

A geographic region within which calls are generally expected to be served by a particular cell site.

b. Cell Site

A building location containing antenna and radio equipment necessary to provide the radio link between the cellular system and the cellular mobile radio unit.

c. Cellular Geographic Service Area

The geographic areas, authorized by the Federal Communications Commission, to be served by the Company's cellular system as set forth on the map on sheet 18. (T)

d. Cellular Mobile Radio Unit

Cellular mobile radio telephone terminal equipment (mobile or portable), type-accepted by the FCC, that is capable of being moved from location to location and is technically and operationally compatible with the cellular system.

BULK DOMESTIC PUBLIC CELLULAR RADIO TELECOMMUNICATIONS SERVICE

A. GENERAL (Cont'd)

1. Definitions (Cont'd)

e. Cellular Number

A telephone number provided by the Company and associated with a cellular mobile radio unit and zone office, enabling calls to be originated by, or directed to, that unit.

f. Cellular System

A mobile telecommunications system which provides Domestic Public Cellular Radio Telecommunications Service as defined in the Code of Federal Regulations Title 47, Part 22, as amended.

g. Domestic Public Cellular Radio Telecommunications Service

Cellular service which uses cellular radio technology to provide radio transmission paths between a cellular mobile radio unit and the Public Switched Telecommunications Network or between two cellular mobile radio units. The Company is offering Domestic Public Cellular Radio Telecommunications Service in bulk.

h. End-User

A person, corporation, or other entity that is authorized by the subscriber to use Bulk Cellular Service or a portion thereof.

i. Mobile Service Area

The area within the Cellular Geographic Service Area that is generally served by the Company's cellular system. Subscribers or end-users of cellular service originating and terminating calls within the mobile service area will not incur toll charges. Calls originated within the mobile service area and terminated outside the mobile service area may incur toll charges.

j. Roamer

A roamer is an end-user of a cellular system operated by a person, corporation, or entity other than the Company.

k. Subscriber

The person, corporation or other entity billed and responsible for the payment of rates and charges to the Company for Bulk Cellular Service.

l. Usage

A period of time during which a cellular mobile radio unit engages the cellular system and rates and charges are incurred.

BULK DOMESTIC PUBLIC CELLULAR RADIO TELECOMMUNICATIONS SERVICE

A. GENERAL (Cont'd)

1. Definitions (Cont'd)

m. Zone Office

A designated location from which cellular numbers are assigned. The zone office of the assigned cellular number will be considered the originating or terminating rating point for calls.

2. Regulations

a. Availability of Service

1. Bulk Cellular Service will be provided subject to capabilities of the cellular system, facility availability and reasonable use by the subscriber. Bulk Cellular Service may be temporarily refused or limited due to cellular system capacity limitations.

2. Bulk Cellular Service is subject to transmission limitations caused by atmospheric, topographic, and like conditions, as well as by characteristics of the cellular mobile radio unit.

3. Bulk Cellular Service to any or all subscribers may be temporarily interrupted or curtailed due to equipment modifications, upgrades, relocations, repairs or similar activities necessary for the proper or improved operation of the cellular system.

4. Should the Company execute contracts with other cellular system operators in order to allow roamers to use the Company's cellular system, the Company will file such contracts with the Department of Public Utility Control. Roamers whose cellular carriers do not have contracts with the Company may register their cellular telephone for service with this Company and use a valid credit card for billing purposes.

b. Limitations of Liability

1. In addition to the allowance provisions for interruptions found in The Southern New England Telephone Company Tariffs Part I, General Regulations, the following conditions apply:

(a) The allowance for interruptions will be computed by dividing the duration of the Bulk Cellular Service interruption (measured in days or major fraction thereof from the time the interruption occurs) by a standard 30 day month, and then multiplying the result by the appropriate recurring rate (cellular number and optional features) for each interrupted cellular number. A period of time less than 24 continuous hours shall not be credited. In no case shall the credit exceed the monthly recurring rate.

(b) The Company is not liable for any act or omission of other parties.