

RECEIVED

JUN 15 1995

Before the
FEDERAL COMMUNICATIONS COMMISSION FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554 OFFICE OF SECRETARY

In the Matter of

Petition for Rulemaking
of Pacific Bell Mobile Services
Regarding a Plan for Sharing
the Costs of Microwave Relocation

RM-8643

DOCKET FILE COPY ORIGINAL

COMMENTS
OF THE ASSOCIATION OF AMERICAN RAILROADS

The Association of American Railroads ("AAR"), by its attorneys and pursuant to Section 1.405 of the rules of the Federal Communications Commission ("the Commission"), hereby submits its comments in regard to the Pacific Bell Mobile Services ("Pacific Bell") Petition for Rulemaking Regarding a Plan for Sharing the Costs of Microwave Relocation, filed May 5, 1995 ("Pacific Bell Petition").

Over a period of several years, with extensive input from many parties, the Commission has painstakingly developed procedures for relocation of fixed microwave links from the licensed and unlicensed broadband PCS bands.^{1/} AAR continues to

^{1/} See, e.g., Notice of Proposed Rule Making, 7 FCC Rcd 1542 (1992) (*First Notice*); Notice of Proposed Rule Making, GEN Docket No. 90-314 and ET Docket No. 92-100, 7 FCC Rcd 5676 (1992); Erratum, 7 FCC Rcd 5779 (1992); Further Notice of Proposed Rule Making, ET Docket No. 92-9, 7 FCC Rcd 6100 (1992) (*Second Notice*); First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd 6886 (1992) (*First R&O / Third Notice*); First Report and Order, GEN Docket No. 90-314 and ET Docket No. 92-100, 8 FCC Rcd 7162 (1993); Second Report and Order, ET Docket No. 92-9, 8 FCC Rcd 6495 (1993) (*Second R&O*); Third Report and Order and Memorandum Opinion and Order, ET Docket No. 92-9, 8 FCC Rcd 6589 (1993)

(continued...)

No. of Copies rec'd
List ABCDE

046

applaud the Commission's intelligent affirmations that no fixed microwave licensee can be forced to relocate until it is provided comparable alternative facilities and is fully compensated for all relocation costs.^{2/} As recently as December, the Commission stated that the involuntary relocation policy adopted in the *First R&O* "would ensure that all incumbent entities required to relocate their operations, including public safety, would receive equivalent or better facilities at no cost to them."^{3/} The Pacific Bell Petition would abrogate this fundamental cornerstone of the Commission's rules.

I. **Background: Interest of AAR**

The nation's railroads use private microwave facilities, including many links in the 2 GHz band, to monitor and control over 1.4 million freight cars on more than 215,000 miles of

^{1/} (...continued)

(*Third R&O*); Memorandum Opinion and Order, ET Docket No. 92-9, 9 FCC Rcd 1943 (1994) (*MO&O*); Second Memorandum Opinion and Order, ET Docket No. 92-9, FCC No. 94-303 (1994) (*Second MO&O*).

^{2/} See, e.g., *First R&O*, *supra* note 1, ¶ 24 (should negotiations for voluntary relocation fail, the emerging technology service provider may request involuntary relocation of the fixed microwave licensee, but "must guarantee payment of all relocation expenses, build the new microwave facilities at the relocation frequencies, and demonstrate that the new facilities are comparable to the old"); *Third R&O*, *supra* note 1, ¶ 16 ("incumbents subject to involuntary relocation will have the entire relocation cost paid by the emerging technology service provider"); *Second MO&O*, *supra* note 1, ¶ 4.

^{3/} *Second MO&O*, *supra*, ¶ 4 (citation omitted).

track. Microwave systems relay critical telemetry from trackside defect detectors, transmit signals and remotely control switching of tracks, and are vital to coordination of operations among railroads. Trains must be safely routed through busy depots and freight yards, collisions with trains from other railroads must be avoided, and automatic transmission of information regarding damaged rails or train axles is critical to permit railroad personnel to prevent derailments.^{4/} Accordingly, it is of paramount importance to ensure that deployment of new technologies such as Personal Communications Services ("PCS") does not threaten the safety and reliability of the railroads' fixed microwave operations. AAR therefore has participated actively in every stage of the Commission's proceedings relating to microwave relocation.^{5/}

II. Discussion

Pacific Bell's Petition for Rulemaking focuses on a plan to allocate costs of microwave relocation among the PCS licensees

^{4/} See, e.g., U.S. Department of Transportation Federal Railroad Administration, Railroad Communications and Train Control: Report to Congress, at 55-57 (accidents that can be avoided by positive train control systems) (July 1994).

^{5/} See, e.g., AAR Petition for Clarification, filed March 23, 1992; Petition to Suspend Proceeding, filed by AAR, the Large Public Power Council and the American Petroleum Institute on April 10, 1992; AAR Comments, ET Docket No. 92-9, filed January 13, 1993; AAR Reply Comments, ET Docket No. 92-9, filed February 12, 1993; AAR Reply Comments, ET Docket No. 92-9, filed November 18, 1993; AAR Comments, ET Docket No. 94-32, filed December 19, 1994; AAR Reply Comments, ET Docket No. 94-32, filed January 3, 1995.

who create harmful interference with fixed microwave operations. AAR has no dispute with that objective. Pacific Bell proposes, however, "that the a [sic.] cap of \$600,000 be placed on the amount paid to relocate any link."^{5/}

A. **The Proposed Cap Would Contravene Well Crafted Commission Precedent**

AAR is concerned by the Petition's attempt to cap the microwave relocation expenses that would be paid by PCS providers. The proposed cap flies in the face of the policies and rules established and carefully refined over several years by the Commission and its Office of Engineering and Technology. The agency has long recognized the critical public interest in ensuring that any microwave licensees forcibly removed from their licensed spectrum will be relocated with minimal disruption and without bearing the costs of the relocation.^{2/} In licensed PCS bands, the Commission has provided that relocation terms will be reached by good faith negotiations between the PCS licensee and the incumbent fixed microwave licensee.^{3/} If the parties fail to reach agreement after expiration of the negotiation periods, the PCS licensee may request involuntary relocation of the microwave operations provided that the PCS licensee "guarantees

^{5/} Pacific Bell Petition at 10.

^{2/} See *supra* nn. 2, 3.

^{3/} See, e.g., *Second MO&O*, ¶ 28 & n.42 (encouraging parties to voluntarily agree to utilize alternative dispute resolution ("ADR") techniques during negotiations); *Third R&O / MO&O*, ¶ 15 (parties must negotiate in good faith).

payment of all costs of relocating to a comparable facility . . . includ[ing] all engineering, equipment, and site costs and FCC fees, as well as any reasonable additional costs," completes all activities necessary for placing the new facilities into operation, and builds and tests the new system.^{2/} The agency has properly recognized microwave licensees' reasonable expectation that if they are forcibly moved from one band to another, all costs of that relocation will be covered by the incoming PCS providers.

B. Any Intelligent PCS Bidder Already Reduced its Bids To Accommodate Necessary Microwave Relocation Expenses

The only excuse Pacific Bell offers to explain its proposal is that "parties may still be concerned that some links are associated with excessive premium costs." Whatever those unspecified costs could be, by purchasing a PCS license, the PCS newcomer to the band assumed the obligation of either refraining from causing harmful interference or relocating microwave links to a different band. PCS licensees were placed on notice by the Commission of the presence of microwave links in their bands, and they had every opportunity to adjust their bids by their anticipated costs of relocating those links. The geographic locations and frequencies utilized by specific microwave links can be determined easily through frequency coordinators such as Comsearch. Over 90% of the A and B licenses for the top 10 markets, and over 60% of all A and B licenses, were won by three

^{2/} See *Third R&O*, ¶ 5; 47 C.F.R. § 94.59(c).

extremely well capitalized entities comprised of cellular, landline long distance telephone, and cable companies. Such companies were fully capable of reasonably estimating microwave relocation costs for each PCS market area before they placed their bids, and decreasing their bids accordingly. It is disingenuous for the PCS bidders to now come before the Commission and request a cap on relocation costs.

In essence, Pacific Bell is now asking the Commission to give it and other A/B auction winners a free ride equalling any relocation costs greater than \$600,000, even though it must be assumed that each company factored microwave relocation expenses into the bid price which it has agreed to pay. The subsidy requested in the Petition would come at the expense of railroads, utility companies, and users of other microwave services with links in the 2 GHz band.

C. **The Proposal Is Baseless in Fact**

The proposed cap is entirely baseless in fact. Pacific Bell gives absolutely no rationale for its arbitrary \$600,000 figure. In reality, PCS licensees need to recognize that they may simply have to pay more than \$600,000 per link to clear the spectrum. When a microwave link is relocated to a higher band, the higher frequencies are likely to require a greater number of hops per link. The FCC's Office of Engineering and Technology ("OET") conducted a study in January, 1992 which determined that the average path length of existing 2 GHz fixed service operations in the 1.85-1.99 GHz frequency band is 20 miles, and throughout the

2 GHz band is 17.2 miles.^{10/} The study explained that operation of a microwave system on a higher frequency decreases the usable path length.^{11/} At 17.7 GHz, the usable path length is only 5.3 miles.^{12/} If a 17.2 mile 2 GHz link, therefore, is relocated to 18 or 23 GHz, for example,^{13/} the new link would require 3 to 4 hops instead of one. Accordingly, in the example above, the cost of relocation, in light of the number of hops required, would range from \$375,900 (the product of \$125,300 and 3 hops) to **\$814,000** (the product of \$203,500 and 4 hops).^{14/} And these estimates do not include the site acquisition costs for the additional transmit/receive locations. Moreover, if a suitable relocation frequency is unavailable in a particular geographic

^{10/} See Paul Marrangoni et al., FCC Office of Engineering and Technology, Creating New Technology Bands for Emerging Telecommunications Technology, OET/TS 92-1, at 15, 16 Figure 2 (January 1992) (*OET Study*).

^{11/} *Id.* at 15.

^{12/} *Id.* at 16 Figure 2.

^{13/} The Commission was prescient in presenting these figures three years ago. Use of the 18 GHz and higher frequency bands may be unavoidable in light of proposed MSS satellite feeder link sharing of the 6 and 11 GHz fixed microwave bands.

^{14/} Cost estimates in the OET study for relocation, even to frequencies just above 3 GHz, range from \$125,000 to \$150,000 for transmitters, receivers and replacement antennas; \$300 to \$3,500 for frequency coordination; \$3,000 to \$30,000 for 3 meter high performance antennas necessary in some situations such as highly congested areas; and \$1000 to \$20,000 for structural improvements to support the increased loading of such antennas. See *OET Study*, at 32-33. Thus, the cost to relocate the average length link in our example would range from \$125,300 to \$203,500 per hop, in 1992 dollars.

area, the microwave operations may have to be moved onto fiber optic lines, an exceedingly expensive medium also likely to rapidly send expenses over the proposed limit. The OET study used \$40,000 per mile as its example of fiber installation costs.^{15/} For the average 17.2 mile path length of existing microwave links, the use of fiber would cost **\$688,000** for fiber installation alone, **in addition** to the costs of obtaining zoning permits or variances, pole rights, and the like. Thus, the Pacific Bell proposal to cap costs at \$600,000 per link not only contravenes well-conceived Commission precedent upon which microwave licensees and their customers have reasonably relied, but also rests upon no factual basis whatsoever.

III. Conclusion

The Commission has assured the 2 GHz fixed microwave licensees that if they cannot stay in their bands, they will be relocated smoothly with all expenses paid by the relocater. Based on that assurance, the incumbents acquiesced in the reallocation and accepted the Commission's relocation plan. The proposed alteration of this plan is baseless in fact, would sever the consistent line of well-crafted Commission precedent on this issue and would amount to an illegitimate taking of property despite prior assurance that relocation of microwave facilities would be at the expense of the newcomers. Any reasonable PCS

^{15/} *Id.* at 29-30.

auction winner already decreased its bids by the amount which microwave relocation will cost. There is no reason for the Commission to give those companies a free ride and require microwave licensees to pay the tab.

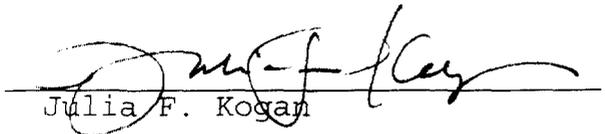
Respectfully submitted,

ASSOCIATION OF AMERICAN RAILROADS

By:


Thomas J. Keller

By:


Julia F. Kogan

VERNER, LIIPFERT, BERNHARD,
McPHERSON AND HAND, CHARTERED
901 15th Street, N.W.
Suite 700
Washington, D.C. 20005
(202) 371-6060

Its Attorneys

June 15, 1995

CERTIFICATE OF SERVICE

I, Bridget Y. Monroe, a secretary with the law firm of Verner, Liipfert, Bernhard, McPherson and Hand, hereby certify that on this 15th day of June, 1995, a copy of Comments of the Association of American Railroads of Pacific Bell Mobile Services Petition for Rulemaking was mailed, first class postage prepaid to the following:

Regina M. Keeney, Esq.
Chief, Wireless Telecommunications Bureau
Federal Communications Comm.
2025 M Street, NW -- Room 5002
Washington, D.C. 20554

Mr. Ralph A. Haller
Deputy Chief, Wireless Telecommunications Bureau
Federal Communications Comm.
2025 M Street, NW -- Room 5002
Washington, D.C. 20554

Mr. Gerald P. Vaughan
Deputy Chief, Wireless Telecommunications Bureau
Federal Communications Comm.
2025 M Street, NW -- Room 5002
Washington, D.C. 20554

Mr. Bruce A. Franca
Deputy Chief, Office of Engineering & Technology
Federal Communications Comm.
2000 M Street, NW -- Room 7002
Washington, D.C. 20554

Mr. Fred Thomas
Electronics Engineer
Office of Engineering & Technology
Federal Communications Comm.
2000 M Street, NW -- Room 480
Washington, D.C. 20554

John Cimko, Jr., Esq.
Chief, Policy Division
Wireless Telecommunications Bureau
Federal Communications Comm.
1919 M Street, NW -- Room 644
Washington, D.C. 20554

Rosalind K. Allen, Esq.
Acting Chief, Commercial Wireless Division
Federal Communications Comm.
2025 M Street, NW -- Room 5202
Washington, D.C. 20554

Mr. Robert H. McNamara
Chief, Private Radio Division
Wireless Telecommunications Bureau
Federal Communications Comm.
2025 M Street, NW -- Room 5322
Washington, D.C. 20554

Michael Wack, Esq.
Deputy Chief, Policy Division
Wireless Telecommunications Bureau
Federal Communications Comm.
1919 M Street, NW -- Room 644
Washington, D.C. 20554

David Furth, Esq.
Deputy Chief, Commercial Wireless Division
Federal Communications Comm.
2025 M Street, NW -- Room 5202
Washington, D.C. 20554

Mr. Edward Jacobs
Deputy Chief, Commercial
Wireless Division
Federal Communications Comm.
2025 M Street, NW -- Room 5202
Washington, D.C. 20554

James P. Tuthill, Esq.
Betsy Stover-Granger, Esq.
4420 Rosewood Drive
4th Floor, Bldg. 2
Pleasanton, CA 94588

James L. Wurtz, Esq.
Margaret E. Garber, Esq.
Pacific Telesis Group - Wash.
1275 Pennsylvania Avenue, NW
Suite 400
Washington, D.C. 20004


Bridget Y. Monroe