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**Before the
Federal Communications Commission
Washington, D.C. 20554**

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**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY**

In the Matter of)
)
Amendment of Part 95 of the)
Commission's Rules to Allow)
Interactive Video and Data)
Service Licensees to Provide)
Mobile Service to Subscribers)

WT Docket No. 95-47

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PETITION FOR RECONSIDERATION

Euphemia Banas, Trans Pacific Interactive, Inc., Wireless Interactive Return Path, L.L.C., New Wave Communications, L.L.C., Loli, Inc., Multimedia Computer Communication, Inc., KMC Interactive TV Inc., Southeast Equities, Inc., Robert H. Steele, MAR Partnership, IVDS On-Line Partnership, A.B.R. Communications Inc., IVIDCO, L.L.C., Vision TV, Dunbar TV, Corp., and Legacy TV, Inc., all of which are Interactive Video and Data Service ("IVDS") licensees (the "Licensees"), acting through counsel and in accordance with Section 1.106 of the Commission's Rules, hereby file this Petition For Reconsideration ("Petition") of the Commission's decision to limit mobile IVDS response transmitter units ("RTUs") to operate with an effective radiated power ("ERP") of one-hundred (100) milliwatts or less. Report and Order, Amendment of Part 95 to Permit IVDS Licensees to Provide Mobile Service, WT Docket No. 95-47, RM-8476 (released May 30, 1996)("1996 Report and Order"). This decision is unnecessary; technically indefensible; arbitrary and capricious; and is not supported by

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the administrative record. The Commission should act promptly to eliminate this ERP limitation. In support hereof, the Licensees set forth the following:

I. Background

1. When it originally authorized IVDS service, the FCC determined that it would limit the ERP of fixed RTUs to a maximum of twenty (20) watts. Amendment of Parts 0, 1, 2 and 95 of the Commission's Rules to Provide for IVDS, 7 FCC Rcd. 1630 (1992) ("1992 Report and Order"). The Commission imposed this limit due to a concern for the possibility of interference with television broadcast Channel 13, especially within the Grade B service contour. Id. at 1635. The Commission also required the RTUs and cell transmitter stations ("CTSs") to contain automatic power controls that would limit the ERP to the minimum necessary for successful communication. Id. Finally, the FCC restricted the CTSs to a maximum ERP of one (1) watt when located within the Channel 13 Grade B service contour. Id. at 1634.

2. Four years later, the Commission adopted the 1996 Report and Order, allowing IVDS licensees to provide mobile service. Since mobile RTUs can move into and out of a Channel 13 Grade B service contour, the Commission limited the ERP of all mobile RTUs to one-hundred (100) milliwatts, whether or not they were operating within a Channel 13 Grade B service contour. Id. at 8.

II. Argument

3. This latest decision to limit the mobile RTUs to one-hundred (100) milliwatts is unnecessary, technically indefensible, and not in the public interest. Although one of the Commission's principle concerns regarding new technologies is to ensure that they do not cause interference to other services, limiting mobile IVDS RTUs to one-hundred (100) milliwatts is unnecessary because of existing interference protections. Furthermore, the limitation creates substantial barriers to the early construction of IVDS networks, postponing service and increasing costs to the public. Finally, by imposing the restriction, the Commission failed to respond to the logical, technical and practical arguments which supported increasing the power limitation on mobile RTUs.

A. The Restriction To 100 Milliwatts ERP Is Unnecessary.

4. The FCC decision to limit mobile RTUs operating anywhere to one-hundred (100) milliwatts ERP, while allowing a fixed RTU within a Grade B contour operate at up to twenty (20) watts and a CTS within a Grade B contour operate at one (1) watt, is totally unnecessary and technically illogical. The Commission considered the potential for interference in the 1992 Report and Order and determined that an ERP of twenty (20) watts for fixed RTUs with automatic power controls, duty cycle requirements and the installation of filters on televisions experiencing interference would provide adequate protections for Channel 13 broadcasters. 1992 Report and Order at 1635. Since the Commission has permitted much higher ERP levels for fixed RTUs and CTSs within the Grade B contour, the limitation on mobile RTUs is ineffective as an

interference protection and only serves to crush the viability of the mobile application of this technology. The Commission determined that a fixed RTU operating at two-hundred (200) times the power limit on mobile RTUs did not create an appreciable potential for interference. It is technically illogical for the Commission to limit mobile RTUs to prevent interference, when the Commission has found that a quantum higher power level for fixed RTUs and CTSs met its interference concerns.

B. The 100 Milliwatts Restriction Is A Substantial Barrier To Expeditious Service To the Public.

5. The Commission's decision to limit mobile RTUs to one-hundred (100) milliwatts was adopted in response to EON's request for IVDS mobility. However, since that time additional information has been developed on the propagation characteristics of the 218-219 MHz band. The one-hundred (100) milliwatts power limitation will serve as a substantial barrier to the Licensees' expeditious provision of service to the public. Field tests performed by one of the Licensee's engineers indicates that a mobile RTU, operating at one-hundred (100) milliwatts, has an effective range of a mile to a mile and a half. A CTS operating at one (1) watt has an effective range of five (5) miles. If this decision stands, Licensees will be forced to construct several remote receivers in each five (5) mile radius of the CTS to boost the mobile RTUs' signal so that it may reach the CTS. The construction and operation of these additional receivers will mean additional costs for antennas, leased lines, power supply and site location leases thus increasing the costs and the amount of time need to construct IVDS systems.

6. If mobile RTUs were permitted to operate at the same maximum power as fixed RTUs, the Licensees would not need to construct remote receivers to boost the mobile unit's signal, as the unit could reach the CTS anywhere within the transmitting range of the CTS. Allowing mobile RTUs to operate at the higher ERP would lower construction costs and allow Licensees to provide service to the public more expediently and at a lower cost. Consequently, retention of the one-hundred (100) milliwatt power limit is contrary to the public interest.

C. The Commission Can Protect For Interference Without Limiting Power To 100 Milliwatts.

7. Even assuming, arguendo, there is some justifiable unaddressed concern about interference from mobile RTUs, the 1996 Report and Order did not address the proven alternative means of preventing interference to the Grade B contour of Channel 13. Several different proposals were submitted to the Commission during the Comment period, and the Commission failed to adequately consider them when making its decision.

8. One such alternative is requiring the use of filters. When constructing fixed RTU service areas, IVDS licensees are required to notify television viewers within the Channel 13 Grade B area and ask them to report any interference. In the event of interference, the IVDS licensee must install a filter on the television to prevent interference. (See Section 95.861(d)). The Commission stated in the 1992 Report and Order that the filter offer was an integral part of TV Answer's plan to eliminate interference. In the Matter of Amendment of Parts 0, 1, 2 and 95 of the Commission's

Rules to Provide IVDS (Notice of Proposed Rulemaking), 6 FCC Rcd 1368, 1370

(1991). The Licensees are prepared to utilize this sensible measure to avoid interference, whenever necessary.

9. The Commission also did not adequately consider the possibility of dynamic power controls, as recommended by Interactive Management Services, L.L.C., and automatic power controls. When the Commission set the one-hundred (100) milliwatt ERP limit, the Commission removed the requirement that mobile RTUs contain automatic power controls. Automatic power controls ensure that an RTU only emits enough power to reach the CTS. Should the ERP for mobile RTUs be raised and the Commission desires an additional level of interference protection, automatic power controls could be again required to insure that the mobile RTUs only operate at the level necessary to reach the CTS, providing a rational and logical trade-off which would reduce the potential for interference with Channel 13.

10. Because CTSs can only operate at a maximum of one (1) watt ERP, Licensees must construct enough cell sites for the CTSs' signal to cover the service area at that power. If automatic power controls are installed within the mobile units, the ERP needed by an RTU to reach a CTS would never be greater than one (1) watt. Permitting the mobile RTUs to operate at the same level as a fixed RTU would not create any additional interference, as the mobile RTU will only function at the same ERP as a CTS within the Channel 13 Grade B contour.

11. The Commission also failed to adequately recognize the ultimate interference protector: Section 95.861(e). Section 95.861(e) mandates that:

each IVDS system licensee must investigate and eliminate interference to television broadcasting and reception from its component CTSs and RTUs, within 30 days of the time it is notified in writing, by either an affected television station, an affected viewer, or the Commission, of an interference complaint. Should the licensee fail to eliminate the interference within the 30 days period, the CTS or RTU causing the interference must discontinue operation.

47 CFR 95.861(e).

12. As previously promoted in the Comments filed by many of the Licensees, these Rules provide Channel 13 broadcasters with a guarantee against any repeated interference from IVDS systems. This sensible protection, which already exists, effectively balances the need for Channel 13 broadcasters to be able to broadcast free of interference and the need for IVDS operators to expedite the delivery of an effective and economical service to the public.

13. Any of the above reasonable alternative means would lessen the potential interference to the Channel 13 Grade B contour, without the drastic increases in construction costs and delays in service to the public that will result from the one-hundred (100) milliwatt ERP limit for mobile RTUs. With the availability of these alternate means of reducing interference, limiting mobile RTUs' ERP to one-hundred (100) milliwatts is unnecessary.

III. Conclusion

14. When the Commission acted to limit mobile RTUs to a one-hundred (100) milliwatts ERP level, it did so in an arbitrary and capricious manner not in the public interest. The decision failed to adequately address why mobile RTUs should be limited to a different ERP than fixed RTUs, when there are sufficient safeguards to prevent interference. The FCC action did not adequately consider the impact the limitation would have on the implementation of IVDS technology and its ability to serve the public. Finally, the ruling did not adequately consider alternative means of preventing interference recommended in the Comments. The 1996 Report and Order stifles mobile IVDS by placing unnecessary operating limits on the service, producing a dramatic increase in system construction costs, while adding little or no interference protection to the Channel 13 operators.

15. The FCC has addressed several alternative means to the one-hundred (100) milliwatt limit when it allotted the spectrum for IVDS in the 1992 Report and Order. These alternatives are still viable and available, but were not addressed in the 1996 Report and Order. Considering the relatively small size of the Channel 13 Grade B contour and the fact that sixty percent (60%) of the television audience receives its signal through cable (which would effectively preclude interference to the broadcast signal), imposing a one-hundred (100) milliwatt cap on mobile RTUs is the equivalent of using a boulder when a pebble would do the job.

WHEREFORE, in light of the foregoing, the Licensees request that the Commission grant the relief requested in this Petition for Reconsideration.

Respectfully submitted,

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