

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of )  
 )  
Amendment of Parts 73 and 74 of the )  
Commission’s Rules to Establish Rules )  
For Digital Low Power Television, ) MB Docket No. 03-185  
Television Translator, and Television )  
Booster Stations and to Amend Rules )  
For Digital Class A Television Stations )

To: the Commission

COMMENTS OF VULCAN SPECTRUM LLC.

Vulcan Spectrum LLC (“Vulcan”) hereby submits its comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) *Notice of Proposed Rulemaking* (“NPRM”), MB Docket No. 03-185, released August 29, 2003, in the above-captioned proceeding. Vulcan opposes the proposal in the Notice of Proposed Rulemaking to allow Low Power Television (“LPTV”) and television (“TV”) translator stations to operate within the Lower 700 MHz spectrum. In accordance with statutory mandate<sup>1</sup> the Commission has structured regulations to clear the Lower 700 MHz Band in order “to support the development of new services”<sup>2</sup> and “to provide services that the market may demand”<sup>3</sup>. Allowing new LPTV and TV translator licensees within the

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<sup>1</sup> See Balanced Budget Act of 1997, Pub. L. No. 105-33

<sup>2</sup> *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, 17 FCC Rcd 1022 at para. 1 (2002) (“*Lower 700 MHz Order*”).

<sup>3</sup> *Id.* at para 1

Lower 700 MHz Band not only promotes spending of capital for systems that will eventually have to be removed, but also promotes additional encumbrance of the Lower 700 MHz Band. Such encumbrances impose significant development barriers and risks to new, evolutionary, wireless services.

For the above reasons, Vulcan asks that the Commission not authorize digital LPTV stations to operate within the Lower 700 MHz Band.

Vulcan currently holds licenses within the Lower 700 MHz C Block auctioned in FCC Auction No. 44 for markets within Washington and Oregon covering a total of approximately 7.2 million people. Vulcan's licenses cover densely populated markets as well as rural areas.

Vulcan intends to facilitate the use of its Lower 700 MHz licenses for innovative services. In such pursuits, Vulcan is well aware of the many barriers that challenge the success of such entrepreneurial ventures. One significant challenge is the presence of the current broadcast incumbents within the Lower 700 MHz Band. The introduction of any additional encumbrances will only serve to further negatively impact the success potential of new innovative services within the band. Specifically, the economic success of new services requires a visible path towards the migration of the incumbent operators to the core channels and not the increase of encumbrances within the band with no clear timeframe for migration.

Vulcan realizes the DTV transition is a complex process, dependant on multiple interests and forces, and lacking a definitive completion date. Vulcan bid and won licenses in Auction No. 44 with the understanding that the Commission was committed to

clearing the spectrum in the most expedient manner possible. The allowance of additional LPTV and TV translator stations within the Lower 700 MHz Band is in direct opposition to the clearing of the band, and, indeed, retroactively alters the value associated with the spectrum that Vulcan has bought. The *ex post facto* alteration of spectrum rights granted by auction undermines the integrity of future auction processes generally, as well as creating an arbitrary 700 MHz environment hostile to investors.

New and innovative services already face substantial challenges in developing and growing new market segments. Indeed, pioneering new services involves the development and testing of cutting edge technologies as well as the development and the understanding of the markets and the forces that will drive their successful growth. A greater number of incumbent TV stations directly effects the development and standardization of new technologies, the ability to successfully test new technologies and services, the ability to broadly deploy new services, and ultimately, the ability to successfully market new services. Secondary status does not alleviate any of these issues.

Although there are numerous emerging technologies capable of delivering advanced services, few have been even minimally deployed in any frequency bands and none in the Lower 700 MHz Band. Furthermore, very few new technologies have been band tested within the Lower 700MHz spectrum. Until the spectrum is reasonably clear of incumbents, there is not enough of a potential market to attract manufacturers to commit to volumes that will drive infrastructure costs within the limits acceptable to operators. Without the scope and scale benefits of volume, operators will only be able to

deploy minimal trial systems at best. Clearing the spectrum as early as possible will remove one definitive barrier to manufacturers' potential market for new technologies.

While there are standards emerging around some early technologies, adoption of such standards by multiple manufacturers and operators will be required before cost advantages are realized. Standardization is critical to the growth of new services, but current standards are immature and will require feedback as operations scale to mature towards reliable, stable, revisions. Until the spectrum is cleared the ability to stabilize standards based on operational feedback will be significantly hampered.

As standards and technologies are deployed, it will be necessary to test the new services, learn what is successful and what is not. These tests must be performed in actual deployments over large areas with real customers. While minimal, early testing can be performed in a simulated lab environment, a majority of the testing must be performed in the actual operating environment with real market forces at play. The nature of the actual operating environment is highly statistical, and can be represented as a multi-variable, random process. This can only be measured statistically to understand how systems perform and how to optimize them in order to maximize performance and meet the needs of the largest possible market. Such testing requires deployments over large areas diverse in both morphology and market demographics. Encumbered spectrum is a barrier to such deployments and will adversely effect the ability of new and innovative systems to be tested and mature. This is especially true in urban areas where the encumbrances are more prevalent and the challenges for new technologies are highly complex.

Timing will be a critical component within the operational plan of new and innovative services. Such ventures will require significant capital and will therefore require revenues within a timeframe that justifies the use of such capital. This means that the timeframe from the early trials to larger area deployments must be as short as possible and cannot be delayed by ambiguity in the DTV transition deadline. Any ambiguity poses significant risk to such new ventures and limits the ability to raise capital.

For all of the above stated reasons, encumbered spectrum is a hard barrier to the evolution of new services within the Lower 700 MHz Band. Secondary status does not alleviate any of the risks associated with clearing the spectrum. The potential legal issues and the time and resources required to address interference and potential interference with current TV operators within the band leave clearing dates highly ambiguous. In the absence of a clear date for transition of all stations, including those with secondary status, there is significant risk and barriers to the success of new and innovative services within the Lower 700 MHz Band.

Any increase in encumbrances within the Lower 700 MHz Band and the lack of a definitive transition date will delay and severely challenge the success of new and innovative services within the band. For the above reasons, the Commission should not allow the use of the Lower 700 MHz Band for additional LPTV and TV translator stations and should take all possible steps to facilitate the rapid migration of all existing stations to the core channels.

Respectfully submitted

Vulcan Spectrum LLC

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