Before the
Federal Communications Commission
Washington DC 20554

In the Matter of	)	
	)	
UltraVision Security Systems, Inc.,	)	ET Docket No. 06-195
Request for Interpretation and Waiver of	)	
Section 15.511 of the Commission's Rules	)	

OPPOSITION TO PETITION FOR RECONSIDERATION

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UltraVision Security Systems, Inc., manufacturer of the "UltraSensor" ultra-wideband security system, opposes the Petition for Reconsideration filed on December 18, 2008, by the Association for Maximum Service Television, Inc. (MSTV) (MSTV Petition).

A. SUMMARY

When MSTV initially opposed UltraVision's waiver request, it cited a study that predicted interference to digital TV reception at distances up to 78 feet, and to analog TV up to 452 feet. UltraVision disputed the relevance of the study, but nonetheless agreed to waiver conditions, later adopted by the Commission, that relied on those same numbers. The waiver prohibits operation within 452 feet of an area zoned for residential development or mixed use, and within 78 feet of the customer's property line.

These conditions give MSTV all of the substantive relief it indicated was necessary.

MSTV nonetheless seeks reconsideration, in part by disputing its own figures for the separation distances. The about-face does not rest on data, or even on modeling, but merely on unsupported speculation. MSTV also does not explain why, after proposing its

numbers, it left them unquestioned in the record for twenty months and comes forward to challenge them only now, after the Commission has acted. The delay is significant because the rules disfavor a petitioner's raising facts that could have been brought out earlier.

MSTV adds a new request in the alternative: that waivered facilities be "coordinated." The separation distances, according to MSTV's own estimates, eliminate any realistic threat of interference to TV reception, and so make any form of coordination unnecessary. The precise form of coordination that MSTV seeks is unclear. In any event, having failed to make the request during the pendency of the proceeding, MSTV should be barred from raising it now.

MSTV also interposes frivolous procedural objections, which we address below.

B. BACKGROUND

The UltraVision waiver is needed because a quirk in the rules would otherwise preclude certain devices having *lower* interference potential than a compliant device.

The rules subject an ultra-wideband surveillance system to emissions limits in several bands, including two of interest here: below 960 MHz, and 1990–10,600 MHz.[1] The rules require the operating bandwidth to lie in the 1990–10,600 MHz range.[2] The Commission may have contemplated that frequencies under 960 MHz would carry only spurious emissions. But nothing in the rules requires that. An ultra-wideband

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[1] 47 C.F.R. § 15.511(c).

[2] 47 C.F.R. § 15.111(a) (UWB bandwidth must be contained between 1990 and 10,600 MHz).

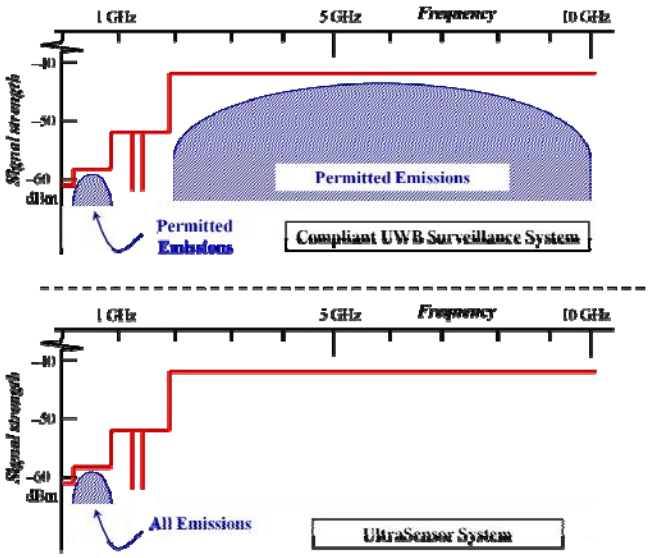

Figure 1: UltraSensor vs. Compliant System

surveillance system would fully satisfy the rules with intentional emissions in both bands. See Figure 1, upper sketch.

UltraSensor complies with the emissions limits in all bands. The sole regulatory issue arises from its having no emissions at all above 960 MHz. See Figure 1, lower sketch. Accordingly, UltraSensor violates the requirement of an operating bandwidth within 1990–10,600 MHz. UltraSensor needed a waiver despite its occupying far less spectrum and presenting a lower potential interference overall than the compliant two-band device shown in the upper sketch.

The sole opponent to the waiver request was MSTV. Stripped to its essentials, MSTV's opposition rests on a claim that the prescribed emissions limits below 960 MHz are set too high.[3] According to MSTV, even a device in compliance with those limits presents an interference hazard to broadcast TV at distances out to 78 feet (digital) or 452 feet (analog).[4] Of course a fully compliant two-band system would threaten the same interference, yet would not require a waiver. (Figure 1, upper sketch.) UltraSensor fails

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[3] Comments of Association for Maximum Service Television. Inc. at 4-6 (filed Feb. 20, 2007).

[4] *Id*. at 6.

to comply, and is exposed to MSTV's opposition, only because it lacks emissions above 960 MHz.

C. MSTV'S PETITION CONTRADICTS ITS OWN POSITIONS.

MSTV does not try to argue that UltraSensor is more interfering than a compliant ultra-wideband surveillance system. It sets itself a far easier task: comparing UltraSensor to a ground-penetrating radar (GPR).[5] GPRs are irrelevant here. As an historical fact, it is true that UltraSensor derived from GPR technology,[6] and the Commission notes some differences between GPR and UltraSensor implementations.[7] But UltraVision did not seek a waiver of the GPR rules. Its product is a surveillance device. Its interference potential should be measured against that of compliant surveillance systems.

MSTV cites GPR properties in efforts to counter the Commission's conclusion that the waiver will not increase interference potential.[8] This misses the mark. It was the departures from GPR characteristics noted by MSTV – upward emissions, continuous operation, and larger potential market – that prompted the Commission to impose conditions on UltraSensor more stringent than those imposed on GPRs.

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[5] MSTV Petition at 6-7.

[6] *UltraVision Security Systems, Inc. Request for Interpretation and Waiver*, 21 FCC Rcd 13506 at ¶ 6 (released Nov. 20, 2008) (*Waiver Order*); Request for Interpretation and Waiver of UltraVision Security Systems, Inc. at 1 (filed Oct. 6, 2006).

[7] *Waiver Order* at ¶ 13.

[8] MSTV Petition at 6-7.

As noted, MSTV predicted interference to digital TV reception at distances up to 78 feet, and to analog TV up to 452 feet.[9] These numbers came from a study using a type of transmitter having much higher average power than UltraSensor, and thus being far more likely to cause interference.[10] Nevertheless, in order to expedite a waiver grant, UltraVision agreed to accept MSTV's separation distances.[11] The Commission subsequently incorporated them into its order.[12]

The Commission, in short, adopted protective rules based on MSTV's own numbers. In a surprise turnaround, MSTV now seeks to attack those numbers. The distances at which it predicted interference, says MSTV, were "not intended . . . to suggest that such separation distances alone are sufficient to avoid interference to TV viewers."[13] MSTV does not present new data or models that might call the distances into question, but merely speculates that "higher gain outdoor antennas" or an "aggregate

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[9] Comments of Association for Maximum Service Television. Inc. at 6 (filed Feb. 20, 2007).

[10] Letter from Mitchell Lazarus to Ms. Marlene H. Dortch, Secretary, FCC at 2-4 (filed April 16, 2007).

[11] UltraVision agreed to prohibit installation within 140 meters (452 feet) of a residentially zoned area through the digital transition date, and within 24 meters (78 feet) of residential zoning after that date. UltraVision Reply to Comments of MSTV at 10 (filed March 8, 2007). UltraVision subsequently offered also to bar installation within 24 meters of the nearest boundary of the customer's site. Letter from Mitchell Lazarus to Ms. Marlene H. Dortch, Secretary, FCC at 2 (filed June 21, 2007).

[12] The Commission prohibited installation within 140 meters of residential or mixed-use zoning for all time, with no cut-off after the digital transition date, and within 24 meters of the property line. *Waiver Order* at ¶ 21(4).

[13] MSTV Petition at 7.

interference effect" might require greater distances.[14] There is no technical analysis in support.

We thought MSTV's original statement – concerning the distances at which it thought UltraSensor could cause interference – was reasonably clear.[15] But if UltraVision indeed misconstrued MSTV's intent, why did MSTV not speak up? UltraVision offered to adopt MSTV's separation distances on March 8, 2007.[16] UltraVision served a copy of its pleading on MSTV that same day – a full twenty months before release of the Commission's order. MSTV kept its silence throughout. Both the Commission's Rules and simple fairness prevent it from changing its mind now.[17]

D. MSTV'S PROCEDURAL OBJECTIONS HAVE NO BASIS IN THE LAW.

MSTV raises two procedural issues. Both are groundless.

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[14] *Id*.

[15] That statement read: "Canadian Research Centre Canada ('CRC') and MSTV have conducted laboratory testing and field studies showing that operation of TV band devices at the Part 15.209 out-of-band limits [applicable to UltraSensor below 960 MHz] will cause significant interference. These tests . . . have demonstrated that unlicensed devices, complying with the out-of-band emission limits, could cause interference to DTV sets at distances up to 78 feet and interference to analog TV sets up to 452 feet." Comments of MSTV at 6 (filed Feb. 20, 2007) (citation footnotes omitted. As noted in text above, the "TV band devices" used in the study are much more interfering than the UltraSensor system.

[16] UltraVision Reply to Comments of MSTV at 10-11 (filed March 8, 2007).

[17] *See* 47 C.F.R. § 1.106(c) (presumptively barring reliance on reconsideration on facts not previously presented to the Commission).

1. The Commission never ruled out the possibility of ultra-wideband waivers.

According to MSTV, the Commission announced it would not grant waivers for ultra-wideband technologies.[18] That is simply wrong. For its support, MSTV cites to the entirety of all three ultra-wideband rulemaking orders.[19] These indeed mention the possibility of future rulemakings,[20] but none suggests excluding waivers. Such a limitation would be odd, considering that the Commission has issued at least four ultra-wideband waivers prior to this one.[21] It would be odd also in light of long-standing court rulings that the absence of a waiver option "poses legal difficulties."[22]

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[18] MSTV Petition at 2 ("In its original decision establishing rules for UWB devices, the Commission indicated that it would consider additional UWB technologies and frequency bands in future rule making actions *not as a matter of waiver of the rules*.") (emphasis added).

[19] *Id*. at 2 n.3.

[20] *E.g.*, *Ultra-Wideband Transmission Systems*, First Report and Order, 17 FCC Rcd 7435 at ¶ 1 (2002).

[21] *Curtis-Wright Controls Inc.*, 22 FCC Rcd 815 (2007) (perimeter intruder detection device); *Multi-Band OFDM Alliance Special Interest Group*, 20 FCC Rcd 5528 (2005) (communications device); *Siemens VDO* (Office of Engineering and Technology June 23, 2003) (automotive radar), *cited by Ultra-Wideband Transmission Systems*, 19 FCC Rcd 24558 at ¶ 49 (2004); *Ultra-Wideband Transmission Systems*, 17 FCC Rcd 13522 at ¶ 6 (2002) (ground-penetrating and wall-imaging radar).

[22] "The salutary presumptions [of regularity in regulation] do not obviate the need for serious consideration of meritorious applications for waiver, *and a system where regulations are maintained inflexibly without any procedure for waiver poses legal difficulties*." *WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (emphasis added).

2. The waiver grant did not violate the APA.

MSTV challenges the waiver with a court decision that requires public comment prior to agency action that affects other parties' rights and interests.[23] In particular, MSTV complains that the *Waiver Order* violates the Administrative Procedure Act by amending the Table of Allotments without a notice-and-comment rulemaking.[24]

One might think from these arguments that the Commission acted behind closed doors. To the contrary, it gave public notice of UltraVision's request and accepted comments,[25] including one from MSTV. Its order exhaustively discussed and accommodated MSTV's concerns.[26] Especially coming from MSTV, a complaint that the Commission failed to allow for notice and comment is baffling.

Nor can MSTV make a case that the Commission must proceed by rulemaking rather than by waiver. As noted above, the U.S. Court of Appeals for the D.C. Circuit not only found waivers to be procedurally acceptable, but required that the procedure be available.[27] And the *Waiver Order* made no change to the Table of Allotments. Ultra-wideband devices, including UltraSensor, are authorized as unlicensed intentional radiators under Part 15 of the Rules. Because Part 15 devices must protect all authorized

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[23] MTSV Petition at 4.

[24] *Id*.

[25] *Office of Engineering and Technology Declares the UltraVision Security Systems, Inc. Request for a Waiver of Part 15 To Be a "Permit-but-Disclose" Proceeding for Ex Parte Purposes and Requests Comments*, 21 FCC Rcd 11928 (Oct. 24, 2006).

[26] *Waiver Order* at ¶¶ 8-11, 15-18.

[27] *WAIT Radio v. FCC*, above at note 22.

users from interference, and are not entitled to protection themselves,[28] they do not qualify for an allocation, and hence are not listed in the table. In any event, the waiver merely allows UltraSensor to operate in *less* spectrum than a compliant ultra-wideband surveillance system, not more. Even if Part 15 devices were listed in the table, UltraSensor still would not require an amendment.

E. COORDINATION WITH BROADCAST STATIONS IS NEITHER NECESSARY NOR FEASIBLE.

MSTV asks the Commission to require that UltraSensor facilities "be coordinated so that any impact on local broadcasters and their viewers can be identified and remedied as quickly as possible."[29] It offers nothing more in the way of specifics.

MSTV withheld this request during the two years the proceeding was pending. Having declined to give the Commission an opportunity to rule in an open docket, it should not be permitted to raise the issue for the first time on reconsideration.

A coordination requirement would serve no purpose. The Commission's having incorporated MSTV's separation distances into the waiver will eliminate any realistic threat of interference to TV reception. MSTV might reasonably demand adequate separation, or coordination, but not both. Having achieved exaggerated separation distances, it is not entitled to more.

In any event, it is not clear what MSTV wants. Frequency coordination is a highly specific, procedure-driven process that enables incumbent licensees to protect

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[28] 47 C.F.R. § 15.5.

[29] MSTV Petition at 8.

their receivers from a proposed transmitter.[30] It usually also allows the newcomer to predict and avoid interference from the incumbents. The procedures rest on detailed particulars about the geographic and frequency relationships between the incumbent and incoming users. Here, coordination in the usual sense would require the involvement of television viewers on technical issues. We cannot believe that to be MSTV's intent. But if MSTV instead wished to propose some novel form of frequency coordination, it should have done so in the reconsideration petition. The time for supplementing its petition has now passed.[31]

CONCLUSION

MSTV has not offered any factual or legal justification for reconsideration of the *Waiver Order*.

Respectfully submitted,

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[30] For examples of such procedures, see 47 C.F.R. §§ 90.175, 101.103. Coordination with Federal users is simpler because the National Telecommunications and Information Administration acts as a clearing-house, with the Commission's assistance. *E.g.*, 47 C.F.R. § 15.525.

[31] 47 C.F.R. § 1.106(f) ("The petition for reconsideration and any supplement thereto shall be filed within 30 days from the date of public notice of the final Commission action . . . . No supplement or addition to a petition for reconsideration . . . filed after expiration of the 30 day period, will be considered . . . .")

CERTIFICATE OF SERVICE

I, Deborah N. Lunt, a secretary with the firm Fletcher, Heald & Hildreth, PLC, hereby certify that I have caused copies of the forgoing "Opposition to Petition for Reconsideration" to be sent by first class mail, postage prepaid, this 31st day of December, 2008, to the persons on the attached service list.

(signed)
Deborah N. Lunt

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