BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

Washington D.C. 20554

In re the Application of	)	
	)	
Clarity Media Systems, LLC	)	File No. 0692-EX-PL-2007
	)	
For a License in the Experimental Radio Service	)	

To: Chief, Experimental Licensing Branch
Office of Engineering and Technology

REPLY

Clarity Media Systems LLC ("Clarity"), by its attorneys and pursuant to Section 1.45(c) of the Commission's Rules, hereby replies to the Association for Maximum Service Television, Inc.'s opposition ("MSTV Opposition") to Clarity's "Motion to Strike MSTV Informal Objection" in the above-captioned proceeding on Clarity's application ("Application") for an Experimental Radio Service license. As Clarity explains below, MSTV is wrong on the procedures; its objection to the Application is fatally defective and warrants no consideration. Moreover, through a string of demonstrably preposterous assertions, the MSTV Opposition concisely and conclusively proves that MSTV's "case" against Clarity's new service to the public is made of whole cloth. The tragedy of MSTV's misguided arguments is that they have already delayed by years the provision of the first television service to millions of unserved Americans, the deployment of vast new life-saving resources to recover abducted or missing children and adults, and numerous additional public benefits. The Office of Engineering and Technology ("OET") should immediately grant Clarity's Application to enable the Commission to receive the valuable supplemental field data the experimental operations will provide and to reach an informed, reasoned, and correct decision on whether the public should have the service that Clarity proposes without further undue delay.

I. MSTV'S OBJECTION TO CLARITY'S APPLICATION IS FATALLY DEFECTIVE.

In its Opposition, MSTV acknowledges that Section 5.95 of the Commission's Rules applies.[1] MSTV Opposition at 4. MSTV then recites how its informal objection complies with several of the Part 1 rules that Section 5.95 makes applicable. *Id.* at 5. When it comes to Section 1.45, the rule on the timing of opposition filings, MSTV blithely asserts – without regard to Section 5.95 – that "unless and until the Commission revises its rules, there is no specific deadline for opposing applications for experimental applications." *Id.*

Actually, unless and until the Commission revises its rules, Section 5.95 – and through it Section 1.45 – applies. MSTV's attempt to twist its way out of its gross untimeliness falls flat for two reasons. First, the Application was served directly on MSTV nearly two months before MSTV decided to file an objection. In neither its informal objection nor its later Opposition does MSTV offer any explanation for the extraordinary delay. The only rational inference to draw here is that MSTV decided that an opposition, however untimely, would further delay the gathering of objective information that will help resolve the issues now before the Commission in Clarity's Application for Review in DA 07-1946. Untimeliness is bad enough; untimeliness for purposes of obstructing the resolution of a proceeding that is poised to bring millions of Americans their first television service is something infinitely worse.

Second, MSTV's attempt to hide behind the fact that Experimental Radio applications are normally processed without ever appearing on public notice is unavailing. At the outset, MSTV's maneuver confirms Clarity's point that petitions to deny are not properly lodged against

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[1] As Clarity showed in its Motion to Strike, Section 5.95 specifies that "[a] person or entity desiring to object to or to oppose an Experimental Radio application for a station license or authorization may file an informal objection against that application. The informal objection and any responsive pleadings shall comply with the requirements set forth in §§ 1.41 through 1.52 of this chapter." *See* Clarity Motion to Strike at 1 (quoting 47 C.F.R. § 5.95).

Experimental Radio applications.[2] It defies logic, however, for MSTV to assert that the Commission, when it adopted Section 5.95 and its specific mandate of compliance with Section 1.45 and its timetables, intended that interested persons would have no timetable for entering an opposition or expressing their concerns. Such a position would, of course, read Section 5.95 right out of the Code of Federal Regulations (along with Section 1.45), and undermine the orderly administration and disposition of matters brought before the Commission.[3] The proper conclusion – and the only one legitimately supported by the express words of Section 5.95 – is that MSTV had, at most, up to 30 days after the date on which it was served with Clarity's Application to enter any opposition. MSTV failed to do this by that date, and continued to fail to do so without explanation or leave for nearly another month.

In the end, while Clarity maintains that the MSTV informal objection should be stricken as defective under Section 5.95, retaining the MSTV pleading in the record as an informal objection – as MSTV itself now urges – does not entitle MSTV to any consideration.[4] The Commission is under no Administrative Procedure Act obligation to do anything more than note the submission of the defective pleading when it rules favorably on Clarity's Application.

II. MSTV'S WILD ASSERTIONS PROVE IT HAS NO "CASE" AGAINST CLARITY.

Concerning the substantive arguments in MSTV's Opposition, two things are remarkable. First, the pleading's text is not an opposition at all, but only a repetition of worn and discredited

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[2] *See* Clarity Motion to Strike at 1-2; *see also* 47 U.S.C. §§309(b) and (d)(1) (petitions to deny only lie against applications that must appear on public notice). MSTV, at least, appears to concede this point. *See* MSTV Opposition at 6 n.16. The petition to deny should thus be stricken as Clarity seeks.

[3] In fact, when the Commission adopted Section 5.95 in 2003, it recited the fact that applications for Experimental Radio licenses are not subject to public notice requirements, and put into place Section 5.95 to "provide for the filing of informal objections *that comply with the requirements set forth in Sections 1.41-1.52 of the Rules*." *Amendment of Part 5 of the Commission's Rules to Require Electronic Filing of Applications for Experimental Radio Licenses and Authorizations*, 18 FCC Rcd 16966, 16968 (2003) (emphasis added, footnote omitted).

[4] The Commission has long observed that it is not required to entertain informal requests. *See, e.g., JPJ Electronic Communications, Inc.*, 17 FCC Rcd 5512, 5516 (2002); *Aeronautical Radio, Inc.* 20 FCC Rcd 18849, 18850 (Wireless Telecomm. Bureau, 2005).

allegations that fail to refute the dispositive fact that Clarity has met all Part 5 requirements for the grant of an Experimental license. Second, the last-ditch assertions to which MSTV resorts are so specious that they establish, concisely and conclusively, that no substantive basis for denying the public Clarity's invaluable service exists.

MSTV's Opposition fails entirely to engage Clarity's Motion to Strike on the merits, and instead – without any reference whatsoever to Clarity's Motion – simply reiterates the points Clarity thoroughly refuted earlier in this proceeding and the related Media Bureau proceeding DA 07-1946. Not once does MSTV directly address or even cite to the arguments Clarity advanced in its Motion to Strike against MSTV's same assertions in its informal opposition.[5] MSTV just uses its Opposition to restate its arguments. The dead fish MSTV continues to throw on the dock to delay the inevitable – *i.e.*, the collection of data that confirm objectively and empirically Clarity's showing that its proposed system will operate successfully in the 2025-2109 MHz band on a secondary, non-harmful interference/non-protected basis – are nothing more than red herrings.

Clarity has met every obligation specified in Part 5 of the Commission's Rules for the issuance of its requested Experimental license for the conduct of additional operations of a prototype of its proposed travel-plaza based low-power, short-range television transmission system. MSTV's self-serving assertion (MSTV Opposition at 1-2) that Clarity's proposed experimentation does not reasonably promise to contribute "to the development, extension, expansion, or utilization of the radio art" is absurd. Uniquely different from most technology objectives, which seek to engulf ever wider areas, Clarity has designed a novel ultra-low power short-range system to constrict energy to the tiny grounds of highway travel plazas where the target audience congregates, thereby bringing millions of Americans their first television service, creating a revolutionary means and millions of first responders to help recover abducted and

[5] *See* Clarity Motion to Strike at 3-9.

missing people, and fullfilling Commission objectives for efficient and flexible spectrum use.[6] If proving the technical merits and regulatory compliance of an application that accomplishes those objectives are not contributions to development, extension, expansion, *and* utilization of the radio art, nothing is.[7]

Commission precedent is clear. MSTV has never refuted, that: (1) field experimentation is a vital means for the Commission to obtain critical information to perform its functions correctly, and (2) evidence of actual operations is preferred over "a theoretical basis" in making decisions regarding interference because, "Whatever action is taken ... is based on fact, not speculation."[8] Here, where Clarity's initial field operations at powers levels substantially higher than it now proposes to use caused no observed harmful interference to BAS receivers, MSTV's allegations of massive, blanketing interference from Clarity's tiny transmitters are far too precarious to support the Draconian denial of service to millions and salvation of lives – much less the conduct of additional time- and scope-limited experiments that seek only to quantify the extent of the interfering signals that MSTV decries.

MSTV's assertion (MSTV Opposition at 2-3) that an application for Experimental license is subject to denial solely because it has the potential to cause harmful interference is also unsupported (and unsupportable), and MSTV's reliance on Media Bureau action taken in the context of a request for permanent authority is inapposite in Part 5 proceedings. In the Order under review, the Media Bureau said that there is a potential for harmful interference from

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[6] *See, e.g.*, Report of the Spectrum Policy Task Force in ET Docket No. 02-135, November 2002, at 16.

[7] MSTV's assertions about Clarity's compliance with Section 5.63(a)'s obligation regarding supplementary statements are completely unsupported, and were completely countered in Clarity's Motion to Strike. *See* Clarity Motion to Strike at 4. MSTV's repetition of the obligation from the rules, this time with the addition of underscoring for emphasis (see MSTV Opposition at 1-2), does not change the fact that Exhibit No. 1 to Clarity's Application satisfies the requirement of Section 5.63(a) in full.

[8] *Diversified Communications Engineering, Inc.*, 15 FCC Rcd 2547 (2000)(¶14) ("The data generated by experimentation is expected to provide the Commission with information needed in determining more broadly whether the type of radio service envisioned by the experimenter... should be allowed."); *Metropolitan School District of Wayne Township, Marion County, Indiana*, 75 FCC 2d 601 (1980)(¶¶7-8), *recon. denied* 47 RR 2d 1722 (1980).

Clarity's transmission system that was not disproven in the technical materials Clarity supplied in support of its application; there was no finding that harmful interference would or would likely be caused by operation of Clarity's system. This distinction is significant – and further renders MSTV's reliance on the Media Bureau's contested findings inapposite here.[9] It is not a prerequisite to licensing under Part 5 that an applicant prove the absence of harmful interference to authorized stations in other services. Instead, Part 5 licenses are granted subject to the express conditions that harmful interference not be caused to regular services and that transmissions must immediately cease in the event that harmful interference develops.[10]

Nothing in MSTV's informal objection or Opposition provides any specific evidence (substantial or otherwise) that Clarity's proposed limited operations of transmitters in Arizona and Utah will cause harmful interference to any licensed operations in the 2025-2109 MHz band. The experimental operations already conducted at vastly higher power levels than those to be tested,

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[9] MSTV premises its above argument on its equally untenable assertion (MSTV Opposition at 2) that the very Media Bureau Order of May 2007 that is under review in Clarity's Application for Review ("Order") stands as a binding precedent on the interference question that is there being reviewed. This strained *non sequitur* holds no water. MSTV conveniently ignores the fact that the Order's treatment of the interference issue is poisoned fatally by the erroneous seminal finding of fact that, during the experimental operations previously conducted,

> No attempt was made to actually receive a BAS signal at a fixed receive site or a mobile site (*e.g.* TV Truck) while Clarity was testing its system.

Clarity Media Systems, LLC, DA 07-1946, at ¶ 10 (Media Bur., released May 4, 2007) ("*Order*"). This erroneous finding arose from the Bureau's adoption of misleading Comments submitted by the Society of Broadcast Engineers ("SBE"), which MSTV perpetuated in opposing Clarity's Application for Review even after Clarity revealed the error. See SBE Comments filed September 22, 2006, at 5; Clarity Reply Comments, filed October 23, 2006, at 57-69; Clarity Application for Review at 13; MSTV Opposition to Application for Review at 4. In fact, as Clarity's Reply Comments demonstrated, attempts to receive BAS signals at fixed and mobile TV Truck sites were made during Clarity's first experimental operations, at powers many times greater than Clarity proposes to use, and no harmful interference to BAS signals was observed, all of which SBE and MSTV admitted when the Media Bureau brought individuals with first-hand knowledge together at an October 5, 2007 meeting in the Bureau's office.

[10] *See* 47 C.F.R. §§ 5.85(c) and 5.111(a)(2). *See also Letter dated January 8, 2003, from Charles Iseman, Deputy Chief, Electromagnetic Compatibility Division (EMCD) to J.C. Rozendaal, Esq., et al., re MDS America, Inc. (WC2XPU)*, at 4 ("*MDS America Letter*"). The *MDS America Letter* is noteworthy for comparison of the manner in which regular licensees that stood to be potentially affected by an experimental operation responded to the proposal. The licensees who were concerned about the potential for harmful interference were cited in the letter as having recognized "that the Commission has a 'general desire from a policy perspective to accommodate the licensing of experimental operations' and admitted that 'the choice of a relatively remote ... location, combined with the procedures that [the experimental applicant] has specified ... will provide enough protection to proceed with a time-limited test of its technology.'" *Id.* at 4 n.12.

without any observation of harmful interference, show they will not.[11] Short of reversing the Order and reinstating and granting Clarity's Part 78 applications outright, the only sensible and fair action is to grant Clarity's Application and supplement the results of the initial field tests with the additional data that the Bureau and OET have said will help the Commission decide Clarity's Application for Review correctly.

MSTV's assertions reach their nadir in their spurious defense of MSTV's attempt (MSTV Opposition at 3-4, Engineering Statement at 1, 2) to mislead the Commission that TSB-10-F is the exclusive technical standard to apply to secondary/non-harmful interference operations. Through its engineers, in response to Clarity's demonstration that MSTV has wrongly equated the interference of threshold receiver degradation addressed by TSB-10-F with the existence of harmful interference, which TSB-10-F does not establish,[12] MSTV asserts:

> We are unaware of any recognized industry distinction between "interference" and "harmful interference." By its very nature, all interference is "harmful."

MSTV Opposition, Engineering Statement at 2. Putting aside MSTV's untenable implication that the Commission's regulations are not recognized by the industry MSTV serves, the fact is that there is a world of difference between interference and harmful interference.

That "interference" and "harmful interference" are different is plain from the fact that the Commission Rules spell out separate and different definitions of the terms. "Interference" is

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[11] Plainly, the Commission and OET cannot rely on an Order, like the one under review, that is objectively wrong on the critical facts. *See* n. 9 *supra*. Upon realizing the Order's profound error that SBE's Comments spawned, the Media Bureau itself recognized that the Commission must conduct a *de novo* review of the interference issue, such review will require consideration of what actually occurred during Clarity's initial experiments, and information from supplemental field operations like those in Clarity's Application will help the Commission resolve Clarity's Application for Review properly. Accordingly, the Bureau called the October 5, 2007 meeting and asked the parties to engage in joint supplemental field tests for the Commission's benefit. At the meeting, the Chief of OET specified that he would like to see from any supplemental tests conducted the information that Clarity will obtain and provide pursuant to its Application.

[12] *See* Letter dated November 30, 2007 in DA 07-1946, from Howard Topel and Stephen Baruch, counsel for Clarity, to Secretary, FCC ("*Clarity November 30 Letter*").

defined as "[t]he effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a radiocommunication system, manifested by any performance degradation, misinterpretation, or loss of information which would be extracted in the absence of such unwanted energy." 47 C.F.R. § 2.1(c). This definition is taken from No. 1.166 of the International Radio Regulations. "Harmful interference" is a separate term, also from the International Radio Regulations (No. 1.169), that is defined as "radiation or induction that endangers the functioning of a radionavigation or safety service, or obstructs or repeatedly interrupts a radio service operating in accordance with the Table of Frequency Allocations and other provisions of part 2 of this chapter." 47 C.F.R. § 5.5. *See also* 47 C.F.R. §§ 2.1(c), 101.3.

Interference can cause some performance degradation or loss of information – effects of the kind MSTV decries when it refers to the potential for "threshold degradation" to ENG operations from Clarity transmissions (*see, e.g.*, MSTV Opposition, Engineering Statement at 2) – without rising to the prohibited level of harmful interference. Specifically: ***Interference that does not cause the effects described in Sections 5.5, 101.3, 2.1(c) and numerous other places in the Commission's Rules is not harmful interference.*** Once again, when MSTV asserts the potential for interference without alleging harmful interference, it misleads the Commission.

MSTV's final assertion on the merits, that the D/U signal methodology of Clarity's experimental operations "is not a recognized interference standard" (MSTV Opposition at 4, Engineering Statement at 1, 2) is its most preposterous of all. The use of D/U methodology to assess the risk of harmful interference is widespread throughout the Commission's Rules and history. *See, e.g.*, 47 C.F.R. §§ 22.657, 27.60, 27.1233(b)(3), 73.182(r), 73.183(c), 73.525(e), 73.616 (e)-(f), 73.623(c), 74.793(b)-(c), 80.467, 80.773, 90.545(a), 101.105(a)(6).

MSTV seems to place some significance on the fact that Section 101.105 of the Commission's Rules mentions TSB-10-F as one means of assessing the potential for interference

between fixed microwave systems in a particular frequency band. MSTV Opposition, Engineering Statement, at 2-3 (citing 47 C.F.R. §§ 101.105(a)(5)(i) and (b)). In fact, the very next subsection of the same rule undercuts whatever point MSTV thought it was making by mentioning protection of microwave systems in the context of impact on D/U ratios. *See* 47 C.F.R. 101.105(a)(6) ("[a]ny new link shall not decrease a previous link's desired-to-undesired (D/U) signal ratio below a minimum of 36 dB, unless the earlier link's licensee agrees to accept a lower D/U"). Whatever significance MSTV is attempting to ascribe to TSB-10-F, the fact remains that TSB-10-F is nothing more than a valid tool to use in a process of predicting interference to microwave systems. MSTV continues to ignore Clarity's repeated demonstration[13] that TSB-10-F does not necessarily identify or allow identification of when or whether interference predicted with the tool rises to the level of harmful interference.[14]

The initial experimental operations in which Clarity transmissions at much higher power than it proposes to use caused no observable harmful interference, have already proved that MSTV's allegations of widespread harmful interference based on TSB-10-F are wrong. MSTV appears prepared to stop at nothing in its effort to delay or prevent Clarity from demonstrating through supplemental testing that further power reductions and refinements have virtually eliminated any possibility of harmful interference from Clarity's system.

To be technically qualified to receive an Experimental license, an applicant does not have to disprove the presence of harmful interference; it has to agree to operate its station subject to the

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[13] See Clarity Motion to Strike at 7 n.1 (citing Clarity November 30 Letter at 3).

[14] Clarity obtained the 8 dB D/U figure the Application mentions from MRC, the same popular manufacturer of ENG equipment that MSTV cited in its November 8, 2007 *Written Ex Parte Presentation* in DA 07-1946 (Nov. 2007 Engineering Statement at 6). Clarity recognizes that in arriving at the appropriate D/U ratio for Clarity's signal, account may need to be taken of differences in bandwidth, test equipment measurement uncertainty, variations in ENG receiver quality across manufacturers, and other possible factors. Clarity will fully and soundly address this matter in the report on experimental operations that it will file along with data from the measurements it plans to take. MSTV, of course, has been invited to participate in a cooperative dialogue regarding the reasonable margin and D/U ratio necessary and to participate in joint testing and reporting thereof, and can still do so.

express and immutable condition that it not cause harmful interference to any station operating in accordance with the Commission's regulations. This is the only standard that applies, and Clarity is prepared to accept this condition on its authorization.[15]

III. CONCLUSION

MSTV has misread multiple Commission Regulations, and continues affirmatively to mislead the Commission as to both the potential impact of Clarity's proposed transmission system and the standard pursuant to which both its Part 5 and its Part 78 applications are to be evaluated. Enough is enough. The Commission should grant Clarity's Application forthwith, and allow the record in DA 07-1946 to be supplemented with the objective data the Commission itself has suggested would allow the open proceeding to be successfully resolved.

Respectfully submitted,

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March 4, 2008

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[15] In the absence of a credible showing of harmful interference, MSTV continues to resurrect *ad nauseum* its alleged and previously refuted NIMBY alternatives (MSTV Opposition at n 5). The facts are, however, that the 5 and 3.6 GHz unlicensed bands require the use of contention-based protocol and dynamic frequency selection, which preclude the provision of uninterrupted video programming service; costs of hundreds of millions of dollars to dig up steel reinforced concrete travel plazas across the country's highway system or to acquire 700 MHz spectrum (which in any event gives rights to geographic areas much larger than needed for Clarity's service) are prohibitive to fulfilling the Commission's statutory mandate to provide service to all Americans at reasonable and affordable prices and epitomize irresponsible waste and spectrum inefficiency; and every other suggested alternative is inadequate and unsuitable for Clarity's service. Through extensive examination Clarity has determined the only spectrum in which it can feasibly provide a service that is critically needed by millions of citizens and will save children and adult lives. The Commission should grant the Application for the supplemental field tests that will help the Commission make the correct decision whether to authorize this service to the Commission's everlasting credit, and reject MSTV's unprecedented and baseless call for a condition that would require Clarity to develop equipment for and conduct tests in bands it has determined it cannot use.

CERTIFICATE OF SERVICE

I, Joan M. Trepal, a secretary at Leventhal Senter & Lerman PLLC, do hereby certify that on this 4th day of March, 2008, I caused a copy of the attached Reply be sent via first-class U.S. Mail, postage prepaid, to the following:

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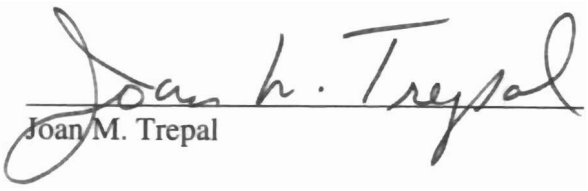
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