

From: David Otey [mailto:david.otey@comcast.net]
Sent: Wednesday, May 18, 2005 2:17 PM
To: James Burtle
Cc: Julius Knapp; Keith Larson; John Wong; Joel Taubenblatt; Mary Shultz; Stephen Buenzow; Ray Benedict; Ralph Beaver; Chris Imlay; Dane Ericksen
Subject: Experimental application 0046-EX-PL-2005 of Clarity Broadcasting Systems - informal objection by SBE

To: James R. Burtle, OET
From: David P. Otey, CSTE, Frequency Coordination Director
Society of Broadcast Engineers
Re: Experimental application 0046-EX-PL-2005 of Clarity Broadcasting Systems

CC: Julius Knapp, OET
Keith Larson, Media Bureau
John Wong, Media Bureau
Joel Taubenblatt, Broadband Division, Wireless Telecommunications Bureau
Mary Shultz, Broadband Division, Wireless Telecommunications Bureau
Steve Buenzow, Broadband Division, Wireless Telecommunications Bureau
Ray Benedict, President, SBE
Chris Imlay, General Counsel, SBE
Dane Ericksen, SBE
Ralph Beaver, SBE

I am writing on behalf of the Society of Broadcast Engineers, Inc. (SBE), to record the informal objection of SBE to the above-captioned experimental application. SBE has an acknowledged role in the voluntary coordination of shared spectrum allocated for Broadcast Auxiliary Services (BAS) under Part 74 of the FCC Rules. Experimental authorizations to share spectrum with BAS users routinely require the grantee to coordinate such usage with SBE, and through such activities the Society has amassed considerable experience and expertise with such coordination. For the reasons outlined below, we are of the opinion that Clarity's proposed use of the 2025-2110 MHz BAS microwave band is so fundamentally flawed that preventing its interference with licensed BAS operations would be difficult or impossible, and beyond the scope of SBE-sponsored frequency coordination. Therefore, we believe this application should be denied.

We are aware that Clarity has applied for an experimental authorization to test a system for point-to-multipoint delivery of subscription video services. We are also aware of Clarity's claim that its proposed operation will not cause interference to licensed users of the 2025-2110 MHz BAS band. However, we are not aware of any data which could substantiate such a claim. For Clarity to ask for essentially the entire, heavily occupied 2GHz BAS band to test a service which would be fundamentally incompatible with the intended use of that band by broadcasters for point-to-point (both temporary and fixed), private internal communications, severely pushes the boundary of what SBE-sponsored, local voluntary frequency coordination is designed to handle.

Let it be understood that SBE stands ready to work with legitimate experimental licensees within the Part 74 bands which we help to coordinate. For example, we have recently assisted AT&T Laboratories with coordination of their testing in New Jersey of certain systems using UHF television broadcasting frequencies. Our local coordinator facilitated communications between the AT&T project lead and potentially affected users in the area. Based on these communications, AT&T engineers were able to plan their testing so as to minimize its potential effects on TV reception. To meet simultaneously their own testing objectives and interference concerns required careful choice of frequencies, times of operation, and directional antennas.

In contrast, the always-on, omni-directional, band-subsuming breadth of Clarity's proposed

operation offers not even a toehold for successful coordination.

Television pickup (TP) operations in the 2025-2110 MHz band must be able to deploy at a moment's notice and to rely on real-time coordination among broadcast entities who are all accustomed to the procedures followed in their respective markets. The additional time required to (a) identify a Clarity transmitter as a source of interference, (b) contact appropriate personnel, and (c) effect positive shut-down of the interfering, secondary service will have a deleterious effect on the intended use of this service. Such a disruption to established coordination practices could easily mean the difference between timely and un-timely delivery of critical, live information to the viewing public.

On top of that, there is the added complexity of coordinating the market-by-market relocation of 2GHz BAS operations from the current 1990-2110 MHz to the narrowed, 2025-2110 MHz band. Under the Fifth Report and Order in WT Docket 02-55, Improving Public Safety Communications in the 800 MHz Band, incumbent 2GHz licensees must be relocated to the new band plan by September, 2007. SBE is working closely with Nextel Communications on implementation issues around this Order.

A key issue for SBE is mitigating the effects of the finite amount of time that will necessarily elapse between the completion of relocation in certain neighboring markets. If this were not addressed, the concern is that interference issues could multiply during the transition period, as a user in one market could potentially represent a co-channel interference source to two or even three channels in a neighboring market using the other channel plan. This illustrates the need to ensure that potential interference sources in the 2GHz band are not only known, but engaged in a compatible service in which dynamic coordination is routinely understood. Further, it illustrates the importance of the confidence broadcasters must have in the systems in place to ensure their successful relocation. Without such confidence, it is unlikely that the very aggressive, FCC-mandated timeline can be met. For this reason alone, it seems a poor time to expect incumbent BAS users to learn how to adapt to a new and incompatible service sharing the entire band.

Finally, it must be pointed out that the Clarity application suffers, through no fault of its own, from the same deficiency as other recent attempts to share BAS frequencies, namely the inability of searches within ULS to reveal TP receive-only sites (a/k/a ENG central receivers). SBE is actively engaged in dialogue with the Wireless Telecommunications Bureau over possible solutions to this problem, which arises from the unique nature of TP operations. Were such site data readily available in search results, surely Clarity would not have made the mistake of trying to co-locate one of their test transmitters with the Frazier Park ENG receive site used by several Los Angeles television stations.

For these reasons – fundamental incompatibility of services, near-impossibility of successful shared-use coordination, and potential disruption to the FCC-mandated 2GHz relocation – SBE raises this informal objection to the experimental application of Clarity Broadcasting Systems, and asks that the application in question be dismissed as flawed.

I am available to discuss this information at your convenience if you wish to contact me.

Regards,
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