

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

In the Matter of

Amendment of Part 15 regarding new requirements and measurement guidelines for Access Broadband over Power Line Systems

ET Docket No. 04-37

REPLY COMMENTS OF THE CITY OF MANASSAS, VIRGINIA

The City of Manassas, Virginia (“City”) submits the following comments in response to the Comments of ARRL, the National Association for Amateur Radio, filed in this docket (and in ET Docket No. 03-104) on May 3, 2004.

ARRL claims that testing done for ARRL disclosed BPL radiated emissions in Manassas that exceeded FCC Part 15 limits and that the BPL signal would cause serious interference to an amateur station having its antenna 30 meters away from the BPL lines. The history of discussions with ARRL and the Ole Virginia Hams Amateur Radio Club (“OVH”) demonstrates that the conclusions of the ARRL presented in the ARRL comments have not been repeated. The testing upon which ARRL relies was done at a location where and time when the city and its equipment provider were testing an enhanced technology. The technology was subsequently modified, however, to eliminate potential unacceptable interference in the ham radio bands. The OVH agreed after subsequent testing that the emission levels disclosed by the tests were no longer a concern.

The City of Manassas filed timely comments in this proceeding on May 3, 2004 in which we supported the Commission’s conclusions in paragraph 48 of the NPRM, and set forth the City’s view that the NPRM appropriately addresses signal interference concerns, while

advancing further BPL deployment. As pointed out in those comments, following a successful pilot program to study the feasibility of BPL as a platform for the delivery of high-speed Internet access to Manassas residents, a Franchise was issued for city-wide deployment of Broadband Over Power Lines to eventually make high speed BPL internet access available to every resident and business within the City.¹ Through the franchise, the grantee supplies equipment and a final connection to the Internet and handles administrative functions such as account administration, help desk support, customer billing, network management, and system monitoring. The City, through its municipal utility, will continue to have responsibility for the fiber optic backbone and the installation and maintenance of BPL equipment outside the home or business.

The City's comments pointed out that the City is sensitive to the concerns held by amateur radio operators. We attached to those comments a letter from Allen P. Todd, P.E., Director of Utilities of the City of Manassas, to James R. Burtle, Chief, Experimental Branch of the Commission, in which Mr. Todd informed Mr. Burtle that the City has met with members of the Ole Virginia Hams (OVH) Amateur Radio Club to discuss their concerns and has established a dialogue with them. Mr. Todd stated that the City used its existing fiber optic network and newly developed BPL equipment provided by Main.net communications to construct a communications network. He advised that today the City is only using BPL equipment provided by Main.net. Main.net's BPL technology has been tested by an A2LA accredited third party test laboratory which has determined that Main.net's devices comply with the FCC's rules for unlicensed equipment, which are designed to prevent interference to amateur radio operators and others.

¹ The initial Franchise Agreement was reassigned by mutual agreement and acquired by the City; the City invited franchise bids for qualified bidders to be submitted by June 7, 2004 and received a number of responsive bids which it is in the process of evaluating.

At a March 23, 2004 meeting with OVH members, the City and Main.net made a presentation of the Main.net BPL technology being used in Manassas, topology of the BPL network, a demonstration of how BPL modems can be programmed to filter sections of the radio spectrum, and a demonstration of how BPL equipment is installed on the Manassas power system. As Mr. Todd's letter points out, dialogue with OVH members is continuing.

Main.net Communications Ltd. also filed comments in this proceeding in which it described the BPL system in Manassas and discussed the meetings with OVH members and the ongoing dialogue.

Contrary to the actual experience in Manassas, the ARRL comments, which raise unwarranted fears in an attempt to thwart BPL deployment, rely upon a test report finding that

[a]t "Manassas-1," measurements indicated that BPL radiated emissions exceeded the FCC Part 15 limit across the range 3.5-14 MHz, the highest point being at 8.75 MHz approximately 5 dB above the limit. This BPL signal would cause serious interference to an amateur station having its antenna 30 meters away from the BPL lines.

ARRL Comments at 16.

The test report upon which ARRL relied was attached as Exhibit A to ARRL's Comments (Report of Metavox, Inc. dated March 20, 2004). The testing in Manassas was performed on March 15, 2004 at a location at Traveller & Weir Streets in Manassas. The City was not informed about the testing and was not present for the testing. Nor was anyone representing the City informed of the results of the testing prior to the issuance by Metavox of its Report. The first the City learned of the testing was when the City's undersigned counsel read ARRL's Comments in this proceeding.

Following the March 23, 2004 meeting with representatives of the OVH, representatives from the City and Main.net went to specific locations chosen by the OVH and/or ARRL as areas

of concern where they claimed to have measured high levels of RF. At the request of the OVH, the City and Main.net representatives met at those locations after normal business hours generally starting at 7:00 PM.

Several meetings were held between March 23 and June 1 between City staff and representatives of the OVH, at three of which measurements were taken by the OVH representatives in the vicinity of the deployed BPL equipment. Representatives of the ARRL were present at the June 1 meeting along with the OVH representatives. At that meeting, no harmful interference from the BPL equipment was detected in the authorized ham radio bands.

Thus, the experience in Manassas, rather than showing that Access BPL produces harmful interference, shows the opposite: the technology employed in Manassas permits the City to comply with the Commission's Part 15 rules and effectively allows for mitigation of harmful radio interference if necessary.

CONCLUSION

Subsequent to the ARRL's filing of initial comments, working with the OVH and ARRL, the City has not found interference at levels that substantiate the ARRL's claim of alleged "serious interference" in Manassas. On at least three occasions where the City and Main.net were present with representatives of ARRL or the OVH to conduct measurements, neither ARRL nor the OVH was able to detect any presence of harmful interference in the ham radio bands. Furthermore, on every occasion when ARRL or OVH representatives contacted the City, the City accommodated them, and went to the field at a time convenient to their schedules. In every case, either ARRL and/or the OVH representatives determined that no harmful interference was present in the ham radio bands.

For the foregoing reasons, the experience in Manassas supports the Commission's findings in its NPRM that the current Part 15 non-interference requirements and emission limits,

along with the proposed changes and additions, will meet the dual goals of adequately providing licensed spectrum users and facilitating the deployment of BPL technology.

Respectfully submitted,

/s/ James N. Horwood

James N. Horwood
Spiegel & McDiarmid
1333 New Hampshire Avenue, NW
Washington, D.C. 20036
202-879-4005

Attorney for the City of Manassas, Virginia

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SERVICE LIST

Chairman Michael Powell
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Kathleen Q. Abernathy
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Michael J. Copps
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Kevin J. Martin
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Edmond J. Thomas, Chief, OET
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Julius P. Knapp, Deputy Chief, OET
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Bruce A. Franca, Deputy Chief, OET
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

James D. Schlichting, Deputy Chief, OET
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Alan J. Scrimme, Chief
Policy and Rules Division
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Rashmi Doshi, Chief
Laboratory Division
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046-1609

Geraldine A. Maise, Deputy Chief
Policy and Rules Division
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Ira R. Keltz, Deputy Chief
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Karen e. Rackley, Chief
Technical Rules Branch
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

John A. Reed
Technical Rules Branch
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Anh Wride
Technical Rules Branch
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Christopher D. Imlay
Booth, Freret, Imlay & Tepper, P.C.
14356 Cape May Road
Silver Spring, MD 20904-6011