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July 17, 2006

VIA E-MAIL

Ms. Katherine Power, Esq.
Spectrum Enforcement Division
Enforcement Bureau
Room 7B-555
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: City of Manassas Access BPL System - Report of Communication Technologies, Inc. Regarding Remedial Efforts to Bring Emissions into Compliance, and to Address Interference Complaint of Dwight Agnew

Dear Ms. Power:

By this letter, Communication Technologies, Inc. ("COMTek"), is writing in response to the FCC Spectrum Enforcement Division's June 16, 2006 letter directing the company to take actions to address Mr. Dwight Agnew's specific claim of harmful interference along Route 234 in Manassas, VA, by July 17, 2006.¹ In particular, the Commission ordered COMTek and the City of Manassas ("City") to provide a detailed report on the actions taken and the progress made in resolving Mr. Agnew's complaint or reducing the emissions along Route 234 to 20 dB below the Part 15 limit. COMTek and the City are pleased to report that, as further detailed below, the remedial actions they have taken have successfully resolved Mr. Agnew's complaint. Emissions in general from the Manassas BPL System along the Route 234 corridor are now below the Part 15 limit, and emissions in the subject area in the amateur radio bands are 20 dB below the Part 15 limit.

¹ The original response deadline established by the FCC to respond to Mr. Agnew's Complaint and provide a system shutdown plan was July 6, 2006. On July 6, 2006, COMTek and the City of Manassas submitted a plan to cease operations should the FCC order that operations be terminated. However, COMTek and the City of Manassas requested and received ten (10) day extensions of time in which to respond to the other issues in the FCC's letter. The response to Mr. Agnew's specific interference complaint is due on July 17, 2006, and the report on the general emission compliance issues for the Manassas BPL System is due on July 26, 2006. Accordingly, this letter is timely filed with respect to Mr. Agnew's complaint. COMTek and the City of Manassas intend to provide the emission and compliance report due on July 26, 2006, by the FCC's deadline.

BPL SYSTEM EMISSIONS ALONG ROUTE 234

In order to determine whether the Manassas BPL System is operating within recommended manufacturer specifications, and also within the FCC's Part 15 emission guidelines, engineers from the BPL equipment manufacturer, Main.net, inspected various system parameters. A field review of the overhead equipment installations along the Route 234 corridor was conducted with support from City personnel to address Mr. Agnew's specific interference complaint. Main.net's system engineer noted that certain locations in the Manassas overhead distribution network along Route 234 would likely benefit from equipment adjustments to ensure that non-conforming equipment did not contribute to unfavorable RF emissions. Main.net made adjustments to the overhead distribution network, including coupling adjustments and alignments, to optimize signal propagation and minimize signal leakage. Main.net also reduced operational power levels to ensure compliance with the FCC's Part 15 emissions requirements.

Once these actions were completed, Main.net proceeded to perform compliance measurements at several overhead and underground locations to verify compliance with the FCC's rules, and to address Mr. Agnew's interference issues as described in the FCC's June 16, 2006 enforcement letter. In total, five (5) overhead distribution locations and five (5) underground locations were measured for compliance. In all cases, the system was determined to be in compliance with the Part 15 limits. The compliance measurements were made with the system in an un-notched state, i.e., with filters "off" in the amateur radio bands.

The testing was performed by Product Safety Engineering (PSE), an expert in BPL compliance measurement, and in accordance with the FCC's measurement protocol for BPL systems. The testing was conducted from June 21-July 16, with measurements taken throughout the day and on weekends, weather permitting. Following completion of the compliance measurements, the equipment under test in the complaint areas was restored to a notched state, which will reduce overall emissions.

DEMONSTRATION OF OPERATIONS 20 dB BELOW THE PART 15 LIMIT

In order to conduct testing sufficient to satisfy the Commission's measurement criteria, PSE sought recommendations from FCC staff, who advised PSE that a bench-test methodology would provide sufficient evidence of the notch depth. PSE conducted testing pursuant to FCC staff recommendation to determine the notch depth in the 7.0 – 7.3 MHz and 14.0 – 14.35 MHz bands (the frequencies identified in the complaint letters). The test results demonstrate that the notch depth is greater than 20 dB in the complaint frequencies. The results of the in-situ compliance measurements, which demonstrate compliance within the FCC Part 15 limits, and the bench tests, which demonstrate that the notches are 20 dB or greater in depth, demonstrate that, with regard to the amateur bands, the BPL RF emissions are 20 dB below the Part 15 limit. The measurements also demonstrate that the Manassas BPL System operates within the FCC's emission guidelines, and adequately protect amateur operators by keeping emissions in the amateur radio bands at least 20 dB below the Part 15 limit in areas where complaints have been received. In fact a consultant, who is a licensed amateur radio operator, was present at the July

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14, 2006 meeting with Mr. Agnew discussed below, who confirmed that the BPL equipment did not cause harmful interference.

A copy of the report prepared by PSE regarding general compliance of the system, and confirmation of the notch depths in the 7.0 – 7.3 MHz and 14.0 – 14.35 MHz bands is transmitted herewith.

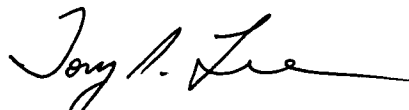
MEETING WITH MR. AGNEW TO DEMONSTRATE COMPLIANCE

On July 11, 2006, COMTek's representative contacted Mr. Agnew and invited him to attend a field test of the Manassas BPL System along the Route 234 corridor to confirm that the adjustments made had either resolved his interference concerns, or that the system emissions in the pertinent frequencies were 20 dB below the Part 15 limit. On July 14, 2006, Mr. Dwight Agnew and other complainants, including Messrs. George Tarnovsky, Arthur Whittum and Donald Blasdell, met with representatives from COMTek, the City, and Main.net. The complainants chose multiple sites along the 234 corridor to test for harmful interference. The demonstration took place between 5:00 p.m. – 7:00 p.m, which is within the peak usage hours for the BPL system (generally between 4:00 p.m. and midnight). At the conclusion of the demonstration, which showed objectively that the system was operating below the Part 15 limit generally, and 20 db below that limit in the amateur radio bands, Mr. Agnew confirmed that subjectively, the remedial actions taken had either eliminated the BPL interference completely or reduced them to acceptable levels.

* * *

Mr. Agnew's complaint has been fully resolved because the Manassas BPL System operates within the FCC's Part 15 emissions limit, the interference experienced by Mr. Agnew has been eliminated, and system emissions in the amateur bands are 20 dB below the Part 15 limit. As will be further described in the report due on July 26, 2006, COMTek and the City will detail the actions taken to ensure that the system as a whole will continue to operate in compliance with the FCC's rules. Should you have any questions with respect to this matter, please do not hesitate to contact the undersigned.

Respectfully submitted,



Tony S. Lee

Counsel for Communication Technologies, Inc.

Enclosure

Ms. Katherine Power, Esq.

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cc: Genaro Fullano, Enforcement Bureau
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