E. Alan Crosswell Amateur Radio Station N2YGK 144 Washburn Road Briarcliff Manor, NY 10510 212-854-3754

October 23, 2004

Customer Communications Con Edison 511 Theodore Fremd Ave Rye, NY 10580

Re: Followup to complaint of March 31, 2004 Re: experimental License WD2XEQ (File No. 0050-EX-ML-2003)

Dear Sir or Madam:

As requested by James R. Burtle, Chief, Office of Engineering and Technology, Federal Communications Commission, enclosed find copies of email sent to Mr. Burtle as well as Sheryl Wilkerson on October 6, 2004.

I await your acknowledgement and reply.

Sincerely,

E. Alan Crosswell

encl: Email to James R. Burtle and Sheryl Wilkerson, FCC

cc: James Burtle Federal Communications Commission James.Burtle@fcc.gov Date: Wed, 06 Oct 2004 10:39:49 -0400 From: Alan Crosswell <alan@columbia.edu> To: James Burtle <James.Burtle@fcc.gov> Subject: Re: Your BPL Complaint

Mr. Burtle:

I first complained to the system operators (Con Edison and Ambient Corporation) as follows:

March 30, 2004: Phone complaint to Con Ed customer service. They gave me the US mail address to send my complaint to.

March 31, 2004: Written complaints to Con Ed and Ambient were mailed.

April 6, 2004: First communication received in response to my complaint from a P.E. hired to represent Ambient Corporation.

To date, Con Ed has never acknowledged nor responded to this complaint.

I have worked with Ambient and with FCC staff on this issue since then. Your files should indicate the history of this, including my formal complaint sent to you on June 22, 2004 on the advice of Riley Hollingsworth to whom I originally sent my formal complaint on June 11, 2004. I also sent these same formal complaints via US mail.

Alan Crosswell

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James Burtle wrote:
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        Dear BPL complainant,
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        The FCC has received your complaint of interference from a
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        Broadband-over-Power Lines (BPL) to amateur radio. The
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        Commission's policy is that parties who believe they are receiving
>
        interference from a BPL system should first refer their complaint
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        to the system operator in order to give the operator an
        opportunity to remedy the problem.
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>
        You may have previously received an e-mail notice from me that the
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        Commission has received your complaint. If so, please note that I
        am sending this message to several complainants because I recently
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>
        discovered that I have had a problem with my e-mail software.
        Some of the messages that I sent were, in fact, not transmitted.
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        I apologize if this message is the second e-mail that you have
>
>
        received acknowledging your complaint.
>
        Jim Burtle
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> >

Subject: Received your complaint Date: Wed, 13 Oct 2004 10:06:56 -0400 From: "James Burtle" <James.Burtle@fcc.gov> To: "Alan Crosswell" <alan@columbia.edu>

Mr. Crosswell,

I have received your complaint of 10/6/2004. Please make sure that the system operator is aware of your observations.

Jim Burtle

Date: Wed, 06 Oct 2004 13:30:18 -0400
From: Alan Crosswell <alan@columbia.edu>
To: Sheryl.Wilkerson@fcc.gov
CC: "Hare,Ed, WlRFI" <wlrfi@arrl.org>
Subject: BPL and notching

Ms. Wilkerson,

I have been informed that the Commission is dicussing the effectiveness of notching to control BPL harmful interference and that there is an imminent deadline approaching to notify the Commission of my experiences with notching as implemented by Consolidated Edison of New York and Ambient Corporation in Briarcliff Manor, NY. Given the short time frame to this deadline and that I have a day job at which I am very busy right now, I have not had time to adequately prepare a better response. I hope this short email will be adequate.

I refer you to Ed Hare of the ARRL for a good scientific study of the BPL interference in Briarcliff Manor, NY and Ambient's failure to mitigate it with notching. My own testing has been that of a casual user of the 20 meter Amateur band using a mobile transceiver mounted in my vehicle. As such, I have not yet had the opportunity to take measurements outside the 20 meter band. I do intend to do so. Following is a summarized chronology of my experience with Ambient's attempt at mitigating harmful interference.

You should also note that the system operator, Con Edison has \*never\* communicated directly with me regarding my formal complaints despite my telephone and written complaints. Ambient has told me that Con Edison "asked them to handle it" but this does not speak well for the ability or interest of the responsible system operator to comply with the letter or spirit of the Commission's rules.

3/27/04 First experienced harmful interference while driving through the BPL test area.

3/30/04 Called Con Ed customer service, was told I would be called back (never was). I also asked for and received a mailing address to send a written complaint.

3/31/04 Sent formal written complaint to Con Ed, Ambient. CC'd to FCC.

4/6/04 Rich Mazzini, a P.E. hired by Ambient made first contact in response to the letter.

4/14/04 Initial conference call with Mazzini, Ram Rao and Yehuda Cern of Ambient.

4/26/04 Ambient makes first claim of mitigation. It didn't work.

4/27/04 Ambient says there's a problem with the equipment and notching didn't work as expected.

5/19/04 Ambient reports that they've been experimenting with mitigation techniques. Still unsuccesfully.

6/11/04 Requested Encforcement Division of FCC to follow through given the extremely long time with no significant improvement.

6/21/04 Mr. Hollingsworth replies, redirecting me to James Burtle. Mr. Burtle acknowledged this email YESTERDAY 10/5/04 claiming an email problem that caused the acknowledgement not to be sent.

7/01/04 First sign of apparent improvement in notching. Interference is reduced but still there.

7/16/04 Mazzini says Ambient has finished their notching. I still see high interference over much of the test area and report this to him.

7/16/04 Escalate my complaint to Riley Hollingsworth after being ignored by Mr. Burtle.

7/23/04 Steve Martin of Technical Research Branch lets me know he is on my case.

8/24/04 Return from vacation to find interference is still there.

8/26/04 Steve Martin reports that FCC staff took readings in Briarcliff Manor and have presented their findings to "FCC staff members in charge of BPL at FCC headquarters."

9/20/04 I have still not heard from the FCC.

9/22/04 Steve Martin replies saying the FCC found two problems and one was addressed and the other was supposed to have been addressed by now. It wasn't.

9/24/04 Steve Martin reports that Ambient claims the interference will be notched by end of business and that if I still see interference I should let them know. I wonder why Ambient can't tell whether they've eliminated the interference or not and are relying on me to do their "RF engineering."

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Since then I have been extremely busy at work (now that classes are back in session) and have only had the opportunity to do a cursory survey of 14 MHz. It appears that this has been notched although the interference is still present in some areas. Meanwhile I have not had time yet to test other Amateur bands and my understanding from speaking to Ed Hare is these bands are still receiving significant interference which I will attempt to confirm as soon as possible.

So, in summary, 6 months from initial complaint of harmful interference and \*maybe\* its mitigated on 20 meters but not on other Amateur bands.

I hope this helps the Commission's deliberations on the viability of notching as a means of eliminating harmful interference.

Alan Crosswell