Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the matter of	)	
	)	
Inquiry Regarding Carrier Current	)	ET Docket No. 03-104
Systems, including Broadband over	)	
Powerline Systems	)	

To: The Commission

REPLY COMMENTS OF
W. J. J. HOGE
TO THE COMMENTS OF POWERCOMM SYSTEMS, INC

By: W. J. J. Hoge
20 Ridge Road
Westminster, Maryland 21157

1. I am a licensed Amateur Radio Operator. My call sign is W3JJH. I received a Bachelor of Engineering degree in Electrical Engineering from Vanderbilt University in 1970. I have been employed in engineering design and management in the broadcast and satellite communications industries and in other areas related to electromagnetic compatibility and interference for over 30 years.

2. I wish to point out to the Commission a flaw in the comments from PowerComm Systems relating to the above captioned matter. None of the spectral data shown relate to actual measurements of an operating BPL system. So far as I know, the only real world interference data taken has been that presented to the Commission by the ARRL. The ARRL's data shows that significant disruption of MF, HF, and VHF communications would be expected if BPL were to be widely deployed under the present Part 15 emission limits.

3. The present Part 15 levels assume a point source of noise. BPL lines are large, distributed, and efficient radiators. A reduction from 30 μV/m @ 30 m to 300 nV/m for the HF range would be a drastic reduction from the current requirement but would still result in a significant increase in electromagnetic smog.

4. PowerComm tacitly admits the interference potential of their system when it notes that

operation in an urban environment such as Nashville would greatly reduce their system's capacity.

5. PowerComm's comments are like many of the others filed in this matter. They are long on modeling and calculations and short, very short, on hard data. There has been much arm-waving to try to show that Maxwell's Equations, Ohm's Law, and other basic principles of Physics do not apply to BPL. Alas, they do. As Scotty say, "Ye canna change the Laws of Physics."

6. The Commission's goal of improved and expanded Broadband Internet access is definitely in the public interest. However, allowing BPL to cripple existing over-the-air services is not.

Dated: 20 August, 2003