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June 21, 2006

VIA ECFS

Marlene H. Dortch, Esq.
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

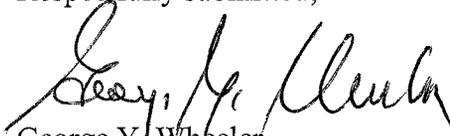
Re: Ambient Corporation
Ex Parte Presentation
ET Dkt Nos. 04-37, 03-104

Dear Ms. Dortch:

Transmitted herewith on behalf of Ambient Corporation ("Ambient") is a letter to Julius Knapp in the Office of Engineering and Technology dated June 19, 2006 as a follow up to the questions asked during our recent meeting regarding the advantages of Ambient's Access BPL systems.

In the event there are questions concerning this matter, please contact the undersigned.

Respectfully submitted,



George Y. Wheeler

cc: Alan J. Scrimme (Alan.Scrimme@fcc.gov)
Bruce A. Romano (Bruce.Romano@fcc.gov)
Geraldine Matisse (Geraldine.Matisse@fcc.gov)
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June 19, 2006

Julius Knapp, Chief
Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

RE: Advantages of Ambient Corporation's Access BPL
Systems

Dear Mr. Knapp:

On behalf of Ambient Corporation ("Ambient") this is a follow up on the questions you raised during our recent meeting. Specifically, we address your question about the continued use of the frequencies in the 2 to 30 MHz range for Access BPL networks. We believe that continued access to this spectrum is essential to promote legitimate opportunities for the development of Access BPL technologies and services to the public and to allow for diversity in BPL technologies to foster the growth of the technology.

- 1) The BPL industry can not afford to lose any of the frequencies presently allocated for the use of BPL networks. While we may not presently be utilizing all of the frequency range (i.e., up to 50 MHz), we are and have been utilizing the frequency range from 2 MHz up to approximately 38 MHz. Ambient's experience over the past six years in developing and deploying the technology and networks has led us to the following conclusions.
 - a) Frequency response is not uniform everywhere and therefore we need flexibility to operate in all of the ranges open to us. In general, the lower frequencies travel farther distances and through more impediments (circuit breaker panels, meters, etc.) over power lines. On the Medium Voltage lines, this means that for a given

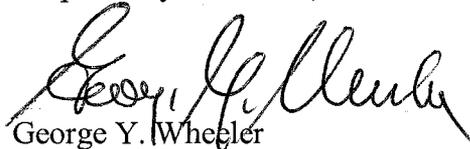
transmit power level, the lower frequency signals travel greater distances which can reduce the need for repeaters thus reducing the overall cost of the system. On Low Voltage lines, this means that the lower frequency signals penetrate further and better into the customer premise thus extending the range of coverage and/or improving throughput speeds delivered to the customer.

- b) Greater frequency range enables more flexibility in network designs and leads to lower costs for build-out. It also allows for networks to be designed and built utilizing frequency division repeating which helps to reduce the cost of building out a network, especially in rural environments where opportunities for cost effective deployment and operation of Access BPL technologies and services could mean that broadband services are available for the first time in underserved areas.
- 2) We have been designing and testing products and networks for the last 2 years based on existing rules (which provide for the use of the 2 to 30 MHz range). We and other manufacturers are on the verge of offering new Generation 2 Access BPL products which are currently being tested in preparation for submission to the FCC of applications for certification. Ambient expects to file for certification of its second generation products about the end of June. Having encouraged the development of these new technologies and services under its Part 15 rules for the operation of Access BPL technologies and services, the FCC should not be taking any action which undercuts this development effort. The competitive benefits of these considerable development efforts will enhance competition in broadband deployment.
 - 3) The presence of utility and other broadband uses of the 2 - 30 MHz provide incentives for utilities to clean up this band as part of the deployment and maintenance of advance Access BPL systems. Based on field experience, excessive noise over portions of the power lines is often caused by faulty insulators, surge arrestors or other devices associated with the power lines. When a BPL system is installed over a segment of power lines, the BPL installer can often pinpoint the source and will have every incentive to reduce this excess noise by identifying and replacing faulty devices. Eliminating use of this band would be counterproductive because it would diminish opportunities and incentives for BPL installers to remedy noisy power lines which interfere with licensed spectrum uses in this band.
 - 4) Nor do possible concerns about interference to the operations of Amateur Radio or Governmental users in the 2 to 30 MHz justify changes in the frequencies allotted for use by Access BPL networks. Such concerns are adequately met under the FCC's notching requirements. As we mentioned in our meeting, recent advances in notching technologies and software being implemented in generation 2 devices confirm that notching technologies can reasonably address such concerns. This means that in

those circumstances where notching is needed to protect licensed users, notching can be implemented to mitigate harmful interference so that spectrum efficient non-interfering Access BPL operations can be conducted on other unused spectrum in this band.

In conclusion, the public benefits of Access BPL to enhance the quality and reliability of utility operations and to provide a new competitive facilities-based resource to delivery broadband service are self-evident. A new generation of Access BPL products meeting the FCC's rules has been developed in the relatively short period since the Commission's Report and Order was released in October of 2004. In reliance on the Commission's regulatory guidelines, Ambient has conducted an extensive test program under Experimental licensing, developed and enhanced software and hardware designs to comply with the Commission's technical rules and will be filing for FCC certification of advanced Access BPL products within a month. Ambient expects that these new products will meet and exceed the performance specifications in the FCC's rules, including compliance with the Commission's notching and other interference mitigation requirements so that operation of these products in the 2 - 30 MHz band will not cause harmful interference to licensed operations. The Commission has encouraged the development of Access BPL technologies consistent with its statutory mandate in Section 7 of the Communications Act. It has sound reasons to conclude that the development of advanced Access BPL technologies in the bands where it is now permitted will promote the public interest objectives on which the Commission relied when it authorized the development of these technologies in its October 2004 Report and Order.

Respectfully submitted,



George Y. Wheeler

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