

Ambient Corporation
August 2009
Call Sign WD2XEQ
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**PROGRESS REPORT OF AMBIENT CORPORATION'S TESTS
PURSUANT TO
EXPERIMENTAL LICENSE**

Ambient Corporation ("Company") submits this six-month progress report in accordance with the conditions of its Experimental License to evaluate broadband access via carrier current systems over power lines.

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Test Sites: The Company has continued its ongoing test program at its test site in Westchester County, New York, since the grant of its original STA in June 2002. The physical layout of this system was unchanged during the last six month reporting period, and as previously reported, now consists of second generation equipment. Radiated emission measurements data taken at locations where new second generation equipment was installed was provided in the Company's Progress Report submitted August 1, 2007.

The Experimental BPL operations by FirstEnergy Corporation in Brimfield, OH previously reported in progress reports are now being conducted under Part 15, Subpart G of the FCC's rules. Entergy Corporation informed Ambient that Experimental operation near Little Rock, Arkansas will be concluded on or before August 1, 2009 and BPL equipment will be removed.

Experimental operation of the in-building Low Voltage demonstration system at a 200 unit high rise apartment building in New York, NY was concluded in June, 2009 as mentioned in the Company's prior progress report.

Testing of Advanced Hardware and Software Capabilities: In the framework of its Experimental License, the Company continues to develop and test methods for enhancing the performance of its BPL systems and to monitor and adjust the parameters of its test facilities to be responsive to the concerns of the amateur radio operators consistent with its obligations under its Experimental License.

The Company continues to collect data for design verification of the power quality and consumption parameters of its second generation equipment (12 units) operating on MV circuitry in Briarcliff Manor. This data is being correlated and verified with data collected by the Utility to provide a statistical basis with which to verify equipment power consumption in different weather, temperature and data capacity conditions.

The Company continues to follow the development of new generations of Smart Grid communication technologies, BPL included, and continues to integrate these technologies into commercial products.

As previously reported to the Commission, the Company has notched out its signals on Amateur bands, demonstrating significant advancements in our technology over the relatively short time period of its test program. These bands include the following Amateur Radio bands: 80, 40, 30, 20, 17, 15, 12 and 10 meters: 3.5-4 MHz, 7-7.3 MHz, 10.1-10.15 MHz, 14.0-14.35 MHz, 18,068-18,168 MHz, 21-21.45 MHz; 24,890-24,990 MHz, and 28.0-29.7 MHz. Also, the Ambient frequency plan was modified to comply with excluded bands of operations according to Table 1 of the FCC Part 15, Subpart G Rules.

The Company also has in place procedures to give prior notification to and to consult with public safety users in the areas where it plans to deploy its Experimental test systems. It has also sent written notifications to public safety users in areas where it has longstanding trials under its Experimental License.

BPL Standards Development: During the last six months, members of the Company's engineering staff participated in the following IEEE meetings:

Aron Viner, Ambient Director of Compliance & Standardization, is Chair of the PLC EMC Standard Working Group which will develop the Standard "Powerline Communication Equipment. Electromagnetic Compatibility (EMC) Requirements. Testing and Measurement Methods." The Draft has been completed and approved by IEEE Power & Energy Communications and EMC Societies, for balloting. The Draft passed the official Ballot Phase with 83% approval received from the balloters and is in process of addressing the Comments from them.

Ram Rao, the Company's Chief Network Architect, and Aron Viner, members of IEEE P1901, the BPL MAC/ PHY Standard Working Group, are participating in the development of a "Standard for Broadband over Power Line Networks: Medium Access Control and Physical Layer Specifications." The Standard is in early stage of development; however, the Working Group made substantial commitments to ensure that EMC issues will be addressed in technical requirements for Coexistence, Access and In-Home Clusters of the Standard. The Working Group has made substantial progress in terms of choosing technical proposals for standards. As of this report, the Working Group is continuing to work on the text of the first Draft. The Draft is expected to be ready by the end of 2009.

Conclusion:

Finally, the Company is focusing its development activity on utility applications that will help develop a "Smart Grid" for the nation's electrical infrastructure. In particular, significant work is being done on integrating the wireless communications, cellular included, with metering technologies.

Implementation of a Smart Grid will allow more efficient usage of electrical energy and reduce consumer use, thus mitigating environmental concerns. Implementation of a Smart Grid would also help secure the electrical power grid. For these reasons, the Company encourages the

Commission to support the expansion and implementation of Smart Grid communication solutions, BPL included, that will help to transform US electrical power systems into a highly efficient, fully manageable and consumer friendly Smart Grid.

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