

**Experimental License Application
Electric Broadband
September 2004**

Experiment Description

The applicant, Electric Broadband, seeks by this application to continue the experimental project currently operating in Cottonwood, Arizona pursuant to the special temporary authorization for WB9XVP (File No. 0136-EX-ST-2004). The applicant seeks to extend this experiment for an additional 24 months under an experimental license.

Electric Broadband is an integrator of Broadband over Power Line (BPL) systems to deliver high-speed Internet access over the electric grid. As noted in the original STA application, the experimental project is to provide Internet access and related broadband services over the medium and low-voltage lines in Cottonwood, Arizona. The project to date has provided valuable information regarding the operation of the Mitsubishi equipment used in the trial for these services. However, the existence of an extremely high noise floor in the area, as well as anticipated changes by Mitsubishi to the trial equipment (including changes suggested by Electric Broadband resulting from the experiment), have made the continuation of this project necessary in order to continue “real world” testing of this equipment and this promising technology.

The continuation of the trial will use, initially the same system configuration (equipment from Mitsubishi Electric Power Products) in the same location as the original STA operation¹. As the trial continues, however, it may be necessary to modify this configuration, including additional subscriber units in a different location where the measured noise floor is not as high. Electric Broadband will, of course, seek appropriate FCC authorization prior to making any such changes. Prior to such additional authorization, the trial will use no more than 10 customer premise units and no more than 16 additional units (medium voltage nodes, repeaters and couplers) as set forth in the original STA.

The continued purpose of the trial will be to evaluate utility communications, customer acceptance and feedback, and compliance with FCC rules and guidelines relating to power line communications equipment operation, including guidelines set out in the pending notice of proposed rule making on BPL. A longer trial will give the applicant the ability to conduct the experiment and evaluate the equipment through product change cycles, thus making necessary modifications based upon testing. In addition, Electric Broadband seeks to further research interference avoidance techniques related to continuing claims that BPL systems in general are incompatible with amateur radio operations. The applicant believes that the current operations are compatible with amateur operations and that BPL in general can be operated without harmful interference. Only through cooperative operation of “real world” tests, however, can such further analysis be conducted effectively. Electric Broadband will, of course, respond appropriately to any specific claims of interference.

As under the STA, customers will receive service at no charge and will be informed of

¹The project descriptions filed by Lance Rosen of Electric Broadband in file no. 0136-EX-ST-2004 are hereby incorporated by reference.

the possibility of immediate termination of the service. Marketing information regarding customer perceptions on ease of use and performance will be gathered.

The restrictions set forth in the existing STA will continue to be appropriate to the extended experimental trial and should remain.